## Till Stannessee



## Undergraduate Catalog 2015-2017

## Tennessee State University Undergraduate Catalog 2015-2017

## A Tennessee Board of Regents Institution

## VOL. LXXIII - 2015-2017

The provisions of this catalog do not constitute a contract between a student at TSU and the University. The sole purpose of the catalog is to provide regulations, course listings and degree programs that are in effect at the time of publication. TSU reserves the right to change the regulations in this catalog at any time during the period for which it is in effect and to add, modify, or withdraw courses at any time. All changes will be published under the TSU webpage at www.tnstate.edu.

## Scope of Catalog

The provisions of this catalog do not constitute a contract between the University and a student who commences any program of study insofar as it relates to the degree requirements for that program during the effective period of this catalog. Degree requirements are subject to change during such period only to the extent required by federal or state laws or accreditation standards. The specific courses or activities constituting the degree requirements for any program are subject to substitution at any time prior to completion by the student.

The remaining provisions of this catalog reflect the general nature of and conditions concerning the educational services of the University in effect at this time, but do not constitute a contract or otherwise binding commitment between the University and the student. Any fee, charge, or cost and all academic regulations set forth in this catalog are subject to cancellation or termination by the University or the Tennessee Board of Regents at any time.
The University provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the University, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student's desire to learn and his or her application of appropriate study techniques to any course or program. As a result, the University does not warrant or represent that any student who completes a course or program of study will necessarily acquire any specific knowledge or skills, or will be able to successfully pass or complete any specific examination for any course, degree or license.
The Graduate Catalog is published under separate cover and may be obtained from the Graduate School Office.

Graduate students interested in graduate work should refer to the Graduate Catalog or inquire at the Office of the Dean of the Graduate School.

## Purpose of Catalog

The Tennessee State University Catalog is the primary general information publication for the University. It is intended to provide information for students and other persons interested in the academic programs and organizations of TSU. In order to understand the activities and programs of the institution, it is important for students to know how to use this catalog effectively.

Students should thoroughly familiarize themselves with the General Information section of the catalog. This section answers questions concerning location of buildings and other facilities on campus, requirements for admissions and graduation, financial aid information, student services and housing.

Student guides to the catalog are the index, the table of contents, and the glossary. Major events, holidays, and semester schedules are listed in the University Calendar.

Students who have already made decisions concerning the area of study in which they are interested, such as English, Mathematics, Engineering or some other field, should turn to the section of the Catalog dealing with their particular interests for information about courses and degree requirements. The colleges and schools are arranged in alphabetical order, with course listings by department and course number.

Students who have questions concerning their academic progress, curricula, or academic standing should consult their advisors or their department chairs. Those students with specific questions concerning specialized areas of study should consult with each specific department.

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Ms. Tiffany Baker-Cox<br>Director of Equal Opportunity and Affirmative Action 3500 John A. Merritt Boulevard<br>Nashville, TN 37209<br>(615) 963-7435

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## Mailing Addresses

## Main Campus

Tennessee State University
3500 John A. Merritt Boulevard
Nashville, Tennessee 37209-1561

## Avon Williams (Downtown) Campus

Tennessee State University
$33010^{\text {th }}$ Avenue North
Nashville, Tennessee 37203-3401

## ACADEMIC CALENDAR 2015-2016

Aug 13
FALL SEMESTER 2015

Aug 13
Aug 17-18
Aug 18
Aug 19-21
Aug 23
Aug 24
Aug 24- 28
Sept 4
Sept 7
Sept 17
Sept 28 - Oct. 2
Oct 3-8
Oct 22
Oct 17
Nov 6
Nov 6
Nov 9 - Jan 13
Nov 11
Nov 23-29
Nov 28 - Dec 4
Dec 3
Dec 4-11
Dec 12
Dec 15
Dec 24 - Jan 3
Faculty contracts for fall 2015 begin
Faculty report for fall semester activities
Faculty/ Staff Institute
Residence Halls Open (New Students)
Freshmen Orientation
Residence Halls Open (Returning Students)
Classes begin
Late registration/Schedule Adjustment
Campus Wide Assembly - First Year Students
Holiday-Labor Day
Recognition of Constitution Day
Student Study Week - No Activities Scheduled
Mid-term Examination Week-all classes meet as scheduled *
Founders Day
Homecoming
Last day to withdraw from courses
Last day to withdraw from University
Registration for Spring 2016
Veterans' Day
Fall Break/Thanksgiving Holiday- no classes
Student Study Week - No Activities Scheduled
Last day of class
Final examinations
Commencement
Faculty must have posted all grades via "MyTSU"
Holiday Break
SPRING SEMESTER 2016
Jan 4 University Re-opens-8:00 am
Jan 11
Jan 12
Faculty/ Staff Institute
Residence Halls open (New Students)
Jan 13 Freshman Orientation
Jan 13 Residence Halls Open (Returning Students)
Jan $18 \quad$ Holiday - MLK - No Classes
Jan 19
Jan 19-22
Mar 1-4
Mar 7-13
Mar 14-20
April 1
April 1
April 4 - Aug 26
April TBA
April 25-29
April 28
April 29-May 6
May 6 (Friday)
May 7 (Saturday)
May 10

Classes Begin
Late Registration/Schedule Students
Student Study Week - No Activities Scheduled
Mid-term Examination Week-all classes meet as scheduled
Spring Break
Last day to withdraw from courses
Last day to withdraw from University-Counseling Center
Registration for Summer and Fall 2016
Honors Convocation
Student Study Week - No Activities Scheduled
Last day of class
Final examinations for Spring 2016 semester
Graduate Students Commencement Ceremony 5:00 p.m., Gentry
Center
Undergraduate Commencement Ceremony 9:00 a.m., Hale Stadium
Faculty must have posted all grades via "MyTSU"

* All scheduled classes meet during mid-term examination week.
** Final examination schedules will be posted via MyTSU and on TSU web page.
***If you are a student enrolled in an ROCC (section R50) course or a TSU faculty teaching an ROCC course, you will follow the TBR common calendar dates for Fall Break [October 10-13] for that course. You will however, be expected to engage and/or participate in all ROCC course activities scheduled November 23-25, 2015.


## SUMMER TERM 2016

## Maymester

| May 9 | Registration-Maymester only |
| :--- | :--- |
| May 9 | Classes begin for 3 week session. |
| May 20 | Last day to withdraw from courses |
| May 27 | Last day of classes |
| May 30 | Faculty must have posted all grades via "MyTSU" |

Full - 10 Week Session
April 4 - May 30
Registration-All Summer Sessions
June 4
Residence Halls open
June 6
Classes begin for full 10 week session.
June 6-8
Late registration/Schedule Adjustments
July 4
Holiday Observed
July 15
Last day to withdraw from 10 week courses
July 15
Last day to withdraw from University-Counseling Center
Aug 12
Last day of classes
Aug 15
Faculty must have posted all grades via "MyTSU"

Session I -- Five Week Session
June 6
June 6-8
Classes begin
Late registration/Drop/Add
June 24
Last day to withdraw from First-session courses
June 24
July 8
July 4

July 11
July 11-15
July 29
July 29
Aug 12
Last day to withdraw from University-Counseling Center
Last day of classes
Holiday Observed

## Session II -- Five Week Session

Classes begin
Late registration/Drop/Add for Summer II
Last day to withdraw from Second-session courses
Last day to withdraw from University-Counseling Center

Aug 15

Final examinations for summer semesters will be scheduled during the last official meeting date/ time for each specific course.

# General Information 

— Historical Statement
— University Mission Statement
— University Vision Statement
— University Core Values

- The Campus
- The University, Program Accreditation and Institutional Memberships
— Undergraduate Degree Programs
- General Fee Information
- Glossary


## Historical Statement

The present-day Tennessee State University exists as a result of the merger on July 1, 1979, of the former Tennessee State University and the University of Tennessee at Nashville.

Through successive stages, Tennessee State University has developed from a normal school for Negroes to its current status. By virtue of a 1909 Act of the General Assembly, the Agricultural and Industrial State Normal School was created, along with two other normal schools in the State, and began serving students on June 19, 1912.

In 1922, the institution was raised to the status of four-year teachers' college and was empowered to grant the bachelor's degree. The first degrees were granted in June, 1924. During the same year, the institution became known as the Agricultural and Industrial State Normal College; and in 1927, "Normal" was dropped from the name of the College.
The General Assembly of 1941 authorized the State Board of Education to upgrade substantially the educational program of the College, which included the establishment of graduate studies leading to the master's degree. Graduate curricula were first offered in several branches of teacher education. The first master's degree was awarded by the College in June 1944.

Accreditation of the institution by the Southern Association of Colleges and Schools was first obtained in 1946.
In August, 1951, the institution was granted university status by approval of the State Board of Education. The reorganization of the institution's educational program included the establishment of the Graduate School, the School of Arts and Sciences, the School of Education, and the School of Engineering.

Provisions were also made for the later addition of other schools in agriculture, business, and home economics, respectively.
The University was elevated to a full-fledged land-grant university by the State Board of Education in August, 1958. The Land-Grant University program, as approved by the State Board of Education, included: the School of Agriculture and Home Economics, the Graduate School, the Division of Business, the Division of Extension and Continuing Education, and the Department of Aerospace Studies.
A School of Allied Health Professions and a School of Business were created in 1974. Also, the School of Nursing was established in 1979.

On July 1, 1979, the former University of Tennessee at Nashville was merged with Tennessee State University as a result of a court order.

Begun initially in 1947 as an extension center of the University of Tennessee, which is based in Knoxville, the University of Tennessee at Nashville offered only one year of extension credit until 1960, when it was empowered by the Board of Trustees of the University of Tennessee to offer two years of resident credit. Authorization was granted to extend this to three years of resident credit in 1963, even though degrees were awarded by the Knoxville unit.
To more fully realize its commitment as a full-function evening university, the Center at Nashville became a full-fledged, fouryear, degree-granting institution in 1971, upon successfully meeting the requirements for accreditation of the Southern Association of Colleges and Schools. During the same year, the General Assembly sanctioned the institution as a bona fide campus of the University of Tennessee, and the new university occupied its quarters in the building at the corner of Tenth and Charlotte Avenues.

It was the erection of the above-mentioned building that gave rise to a decade-long litigation to "dismantle the dual system" of higher education in Tennessee. The litigation, culminating with the merger of both institutions, resulted in an expanded
mission of the present-day Tennessee State University as a Tennessee Board of Regents Institution.
Currently, the University consists of The College of Agriculture, Human and Natural Sciences, The College of Business, The College of Education, The College of Engineering, The College of Health Sciences, The College of Liberal Arts, and The College of Public Service and Urban Affairs; and The School of Graduate Studies.

## University Mission Statement

Tennessee State University, and Historically Black College/University (HBCU), fosters scholarly inquiry and research, life-long learning, and a commitment to service.

## University Vision Statement

Tennessee State University aspires to achieve national and international prominence, building on its heritage and preparing leaders for a global society.

## University Core Values

Tennessee State University maintains the following core values:

- Excellence
- Learning
- Accountability
- Integrity
- Shared governance
- Diversity
- Service


## The Campus

The University has two convenient campus sites. Its central or main campus is located between 28th and 39th Avenues North and is bounded by the Cumberland River on the North and Albion Street on the South. The main campus occupies more than 450 acres with 65 buildings, parking lots, outdoor facilities, and pasture and farm lands.

The Avon N. Williams, Jr. campus is located at Tenth and Charlotte Avenues, in downtown Nashville, with adjacent parking facilities. The "downtown campus" is the site for Center for Extended Education and Public Service, the College of Public Service and Urban Affairs, the College of Business and departmental offices, programs, and courses for of the Colleges of Arts \& Sciences, Education, and Health Sciences. Other facilities include faculty offices, classrooms, lecture halls, computer laboratories, library, and a 400-seat auditorium. Daytime and evening classes are available at the Williams campus.

## Major Buildings - Main Campus

The Research and Sponsored Programs (R/SP) facility houses many technical laboratories, seminar rooms, and R/SP staff offices.
The Walter S. Davis Humanities Building ("A" Building), originally occupied in 1933, was renovated and enlarged in 1967 and 1997. The building houses the Poag Auditorium, the Department of Languages Literature and Philosophy, and the Communication and Information Technologies (CIT) division.
The Ned Ray McWherter Administration Building at Tennessee State University encompasses nearly 25,000 square feet and includes the office of the President; offices of the Vice Presidents for Academic Affairs, Business and Finance, and University Relations and Development; the office of Equity, Diversity, and Compliance; the office of the Chief of Staff and University Counsel; the office of Finance and Accounting, which includes the Bursar's Office; and the office of Budget,

Fiscal Planning, and Travel. Its architectural style complements that of the Otis L. Floyd-Joseph A. Payne Campus Center, dedicated in 1992, and the two buildings are connected by a colonnade.
The James E. Farrell and Fred E. Westbrook Agricultural Complex ("The Barn") is located behind the Lawson Agriculture Building. Extensive renovations were completed in 1991. The building now houses the offices of the School of Agriculture and Consumer Sciences, the greenhouse, laboratories, and a banquet room.
The Alger Boswell Science Complex, completed in the fall 1965 and since renovated and enlarged, is located south of Crouch Hall. It houses research laboratories, classrooms, two auditoriums, and faculty offices, as well as the departmental offices of the Department of Chemistry and the Department of Physics and Mathematics, and the Math Tutoring Center.
The Martha M. Brown-Lois H. Daniel Library is adjacent to the Floyd-Payne Campus Center. The main library is a three-story, contemporary structure built in 1977. It has 82,000 square feet of space with study rooms. Information commons and smart classrooms are available for orientations and training. A unique special collections room houses the Library's historical archives, theses, dissertations, art objects, and special collections, including documents related to the University's unique and colorful history. Media Centers on the main and downtown campuses offer audio visual services as well as a podcasting studio and multimedia room and a variety of computer-based information is available. A full range of services and resources, including embedded librarian program, interlibrary loan, bibliographic instruction, electronic and print books, microfilm, microfiche, periodicals and online databases are also available at both campus libraries.
The R. E. Clay Education Building, erected in 1958 and renovated in 1992, is located on Alameda Avenue, directly west of Clement Hall. This building is equipped with classrooms and special laboratories for teacher education, psychology and reading. The office of the Dean of the College of Education and the departments of Administration, Teaching and Learning, Psychology, and Teacher Education are housed in this building.
Frank G. Clement Hall is located on Alameda Avenue, south of the Brown-Daniel Library. This structure was formerly used as a men's residence hall. It was renovated in 1991 and serves as a classroom/laboratory building containing the office of the Dean of the College of Health Sciences, the departments of Dental Hygiene, Occupational Therapy and Physical Therapy, and the Dental Hygiene Clinic.
The Hubert Crouch Hall contains classrooms, laboratories, faculty offices, and offices for the Dean of the College of Liberal Arts. Also located in this building are the main offices of the departments of Criminal Justice and History, Geography, and Political Science.
The Frederick S. Humphries Complex is located on John A. Merritt Boulevard between the Lawson Agriculture Building and the President's residence ("Big Blue Meadow"). It is a threestory building that contains the School of Nursing and the departmental offices, classrooms, and laboratories for the Department of Family and Consumer Sciences.
The Jane E. Elliott Hall ("Women's Building") is located west of the Harold Love Learning Resources Center (Student Success Center), on the north side of campus. The building contains laboratories, lecture rooms, faculty offices and work rooms, studios for the fine arts and crafts, the Center for New Media, and the Hiram Van Gordon Memorial Gallery.
The Otis L. Floyd-Joseph A. Payne Campus Center was conceptualized and constructed to be one of the nation's most modern facilities of its type. With 229,253 square feet of floor space, the three-level building is an accommodating addition to Tennessee State University. It is a masterful architectural structure featuring brick and limestone and an award-winning interior design. It combines Kean Hall, a renovated athletic
building, with a contemporary multi-purpose center, including a 350 seat auditorium.
The Howard C. Gentry Complex is located on the north side of the campus east of the Edward S. Temple Track. This facility contains a 10,000-seat basketball and convocation arena, an indoor track, handball courts, a dance studio, offices, classrooms, a wellness center, and a 35 -meter swimming pool. The offices of the Department of Human Performance and Sport Science are housed in this complex. Exterior accommodations include basketball courts, softball fields, and parking for 2,000 cars.
Goodwill Manor is a two-story colonial house that was formerly used as the residence of the University President. It was completely renovated in 1991, and is maintained as an historical University landmark. It also serves as the location for the office of Alumni Affairs and the office of Development. The Manor is located in the "horseshoe" just north of Harned Hall.
The Harned Hall of Science, erected in 1927, houses classrooms, lecture auditoriums, laboratories, staff offices and other facilities for instruction and research in the biological sciences.

The Lewis R. Holland Building is located on the southwest side of the campus, west of Crouch Hall. This building contains computer laboratories, classrooms, lecture halls, and faculty offices for the College of Business. Also housed in Holland Hall are the Graduate School, TRIO Programs, and the Center for Service Learning and Civic Engagement.
The Tom Jackson Industrial Arts Building, renovated in 1999, is located at John A. Merritt Boulevard and 35th Avenue. Instructional staff offices for the Aeronautical and Industrial Technology (AIT) program and laboratories for Mechanical Engineering are in this building. This facility also houses The School of Allied Health Professions departments of CardioRespiratory Care Sciences and Health Information Management. The WRITE Center is also located here.

The W. W. Lawson Agriculture Building is located on the north side of John A. Merritt Boulevard between the Davis Complex and the football stadium. The building contains classrooms and laboratories equipped for agricultural teaching and research, as well as the NASA community education lab.
The Jim Nance McCord Hall houses offices, classrooms and laboratories for the departments of Biological Sciences and Computer Science, as well as the Academic Computing Center. It is located directly west of the Library and north of the Clay Education Building.
The Marie Brooks Strange Music Building, erected in 1968 and renovated in 2002 to include the new Performing Arts Building, contains the faculty and department offices for the Music and Communications departments, classrooms, listening laboratories, studios for piano and instrumentation, an auditorium seating 400, and a recital hall seating 226. It is located at the south end of the campus near 35th and Alameda. Also included are state-of-the-art theatre, radio, and television studio environments.
The Andrew P. Torrence Engineering Building is located behind the Alger Boswell Science Complex. Its classrooms and laboratories are equipped with up-to-date equipment for instruction and research in civil, mechanical, architectural and electrical engineering. The building was completed in 1982.
The Harold M. Love Learning Resources Center ("The Old Library") is the location for the Media Center, which has multimedia study carrels available to students on an individual basis and an inventory of audio-visual equipment for loan to faculty for classroom use. The offices of Academic Advisement, and Orientation, Title III, Events Management, and the University Honors Program are in this building, which also houses a 300-seat auditorium.

The Queen Washington Health Service Building has facilities for complete examination and limited treatment for students. The University Counseling Center occupies the 2nd floor, where staff is available to provide individual and group

## The University

Tennessee State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate, Bachelor's, Master's, Specialist in Education, and Doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Tennessee State University.

## Program Accreditations

## Art

## National Association of Schools of Art \& Design

## Music

National Association of Schools of Music
Social Work
The Council on Social Work Education

## Business

AACSB International -The Association to Advance Collegiate Schools of Business

## Education

National Council for Accreditation of Teacher Education (NCATE); American Psychological Association (APA)

## Engineering

BS Degrees in Architectural Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering, Programs are accredited by EAC/ABET
B.S. degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering and Mechanical Engineering are accredited by EAC or ABET
B.S. degree program in Computer Science is accredited by CAC of ABET

Aeronautical and Industrial Technology
National Association of Industrial Technology
Family \& Consumer Sciences
Council for Accreditation of the American Association of Family and Consumer Sciences; American Dietetics Association

## Cardio-Respiratory Care Sciences

Accreditation of Allied Health Education Programs

## Dental Hygiene

Commission on Dental Accreditation

## Health Care Administration and Planning

Association of University Programs in Health Administration
Health Information Management
Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

## Nursing

Accreditation Commission for Nursing Education

## Institutional Memberships

- AACSB International - The Association for the Advance Collegiate Schools of Business
- American Association of Colleges for Teacher Education
- American Association of Colleges of Nursing
- American Association of Collegiate Registrars and Admissions Officers
- American Association of Family and Consumer Sciences-Higher Education Unit
- American Association of State Colleges and Universities
- American Council on Education
- American Psychological Association (APA)
- Association of Administrators of Human Sciences
- Association of Colleges and Schools of Education in State Universities and Land Grant Colleges (ACSESULAC)
- Association of Schools of Allied Health Professions
- Aviation Accreditation Board International (AABI)
- Conference of Southern Graduate Schools
- Council for Counseling Psychology Training Programs (CCPTP)
- Council of 1890 Family and Consumer Sciences
- Council of 1890 Presidents
- Council of Colleges of Arts and Sciences
- Council of Graduate Schools
- Council of Historically Black Graduate Schools
- Council of the Great City Colleges of Education
- Nashville Area Chamber of Commerce
- National Association for Business Teacher Education
- National Association for Equal Opportunity in Higher Education (NAFEO)
- National Association for Multicultural Education (NAME)
- National Association of Collegiate Directors of Athletics
- National Association of Industrial Technology (NAIT)
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of Schools of Public Affairs and Administration
- National Association of State Directors of Teacher Education and Certification (NASDTEC)
- National Association of State Universities and Land-Grant Colleges
- National Collegiate Athletic Association
- National Council for Accreditation of Teacher Education
- National Society of Allied Health
- National University Extension Association
- Ohio Valley Conference
- Organization of Black Airline Pilots (OBAP)
- Southern Association of Colleges and Schools, Inc.
- Southern Business Administration Association
- Southern Regional Education Board
- Teacher Education Council of State Colleges and Universities
- Tennessee Association of Colleges for Teacher Education
- Tennessee College Association
- Tennessee Conference of Graduate Schools
- The College Board
- University Aviation Association (UAA)
- University Council for Educational Administration (UCEA)
- World Council for Curriculum and Instruction (WCCI)


## Undergraduate Degree Programs

Tennessee State University is authorized to grant the following undergraduate degrees:

## School/College/Program <br> Degree(s)

Agriculture, Human and Natural Sciences

| Family Consumer Sciences | B.S. |
| :--- | :--- |
| Early Childhood Education | B.S. |
| Biology | B.S. |
| Chemistry | B.S. |

## Business

Accounting
Business Administration
Economics and Finance
Business Information Systems
B.B.A.
B.B.A.
B.B.A.
B.B.A.

## Education

Human Performance and Sport Sciences B.S.
Psychology
B.S.

## Engineering

Aeronautical \& Industrial Technology Architectural Engineering
B.S.

Civil Engineering
Computer Science
B.S.
B.S.

Electrical Engineering
Mathematics
Mechanical Engineering
B. S.
B.S.
B.S

Health Sciences
Cardio-Respiratory Care Sciences
Dental Hygiene
B.S.

Health Care Administration and Planning
Health Information Management
A.A.S., B.S.
B.

Health Sciences
Nursing
B.S.
A.A.S., B.S.N.

## Liberal Arts

Art
Communication
Criminal Justice
English
History
Interdisciplinary Studies
Music
Political Science
Professional Studies

## Public Service and Urban Affairs

Urban Studies
B.S.

Social Work
B.S

Sociology
B.S.
B.S.
B.A.
B.A.
B.S.
B.S.
B.S.
B.S.
B.A., B.S.

## General Fee Information

Tennessee State University reserves the right to increase the charges listed herein or to add new fees whenever such increases or additions become necessary. All fees and housing rents detailed below are those approved for the academic year 2014-2015 and are subject to change by action of the Tennessee Board of Regents. The listing of any fee or incidental charge in this catalog in no way constitutes a contract between the University and the student. As a condition of registration, each student must pay the appropriate fees in effect and confirm attendance at the time of registration. Bills will not be mailed. Students can access myTSU at http://myTSU.tnstate.edu to view account balances. Fees assessed at the time of registration are subject to audit and correction at a later date. For fees for subsequent years please visit the TSU website at http://www.tnstate.edu/bursar.
The Office of Admissions determines a student's residency classification for fee-paying purposes. If a student is incorrectly classified, he/she will be charged for additional fees owed or refunded fees overpaid.
Checks given in payment of fees, including charges for University housing and board that are subsequently dishonored by the bank must be paid by cash, cashier's check, money order or credit card.
The University assumes no responsibility for monies lost through the mail. Students are advised not to send cash. All monies should be sent to the Vice President for Business and Finance, Tennessee State University, 3500 John A. Merritt Boulevard, Nashville, TN 37209-1561 or paid at the Bursar's Office in the Administration Building. Use "myTSU" to make payments by personal check and credit card (MasterCard, Visa or American Express), unless otherwise specified.

## Registration and Other Fees

NOTICE: The fee amounts listed below are those approved for the 2014-2015 academic year. Fees for the 2015-2016 and 2016-2017 academic years will be published on the University's website when approved by the Tennessee Board of Regents.

## Registration Fees:

All fees are subject to change by the Tennessee Board of Regents. Changes, if made, will be effective July 1, 2015 and/or July 1, 2016.

| Full-time | In-State | Out-of-State |
| :--- | :--- | :--- |
| Undergraduate - 12-hrs. | $\$ 3,465 /$ semester | $\$ 9,825 /$ semester |
| Undergraduate - 13+hrs. | $\$ 49 / h r$. (added) | $\$ 155 / \mathrm{hr}$. (added) |
| Graduate (10-hrs.) | $\$ 4,483 /$ semester | $\$ 10,303 /$ semester |
| Graduate (11+hrs.) | $\$ 79 / \mathrm{hr}$. (added) | $\$ 195 / \mathrm{hr}$. (added) |
| Part-time | In-State | Out-of-State |
| Undergraduate | $\$ 246 / \mathrm{hr}$. | $\$ 776 / \mathrm{hr}$. |
| Graduate | $\$ 397 / \mathrm{hr}$. | $\$ 979 / \mathrm{hr}$. |

Program and Service fee (2014-2015)

| Undergraduate/Graduate: |
| :--- |
| Campus access $\$ 22$ <br> Student government $\$ 4$ <br> Debt service $\$ 89$ <br> Graduation Fee $\$ 5.50$ <br> Technology Access Fee $\$ 112.50$ <br> Student Activity Fee $\$ 70$ <br> Athletics Fee $\$ 160$ <br> International Education $\$ 10$ <br> Postal Service $\$ 15$ <br> Health Service $\$ 25$ <br> Total Fees $\$ 513^{*}$ |

Regents Online Campus Collaborative (ROCC) Registration Fees:

| Classification | In-State | Out-of-State |
| :--- | :--- | :--- |
| Undergraduate | $\$ 246 / \mathrm{hr}$. | $\$ 530 / \mathrm{hr}$. |
| Graduate | $\$ 397 / \mathrm{hr}$. | $\$ 582 / \mathrm{hr}$. |

Additional Regents Online Campus Collaborative Fee: Undergraduate $\$ 98 / \mathrm{hr}$.
Graduate \$98/hr.
ROCC students must pay for every hour, even if their total hours exceed full-time status (i.e., twelve hours for undergraduates or nine for graduates). ROCC students are not required to pay student government, post office, debt service, general access, or student activity fees. If ROCC students desire to attend campus activities, they may request to pay the additional student activity fee.

Regents Online Campus Collaborative (ROCC) courses are charged per hour and are charged separately from TSU courses. Registration fees for ROCC courses are computed in addition to any registration fees for TSU courses and to the full-time maximum for TSU registration fees. ROCC courses will not even exchange with TSU courses when dropping and adding after the term begins. ROCC classes can be identified by section number R50.

## Residence Facility Fees:

| Resident | On-Campus <br> Residence | Hale/Rudolph <br> Residence |
| :--- | :---: | :---: |
| Single (per semester) | $\$ 3,390$ | n/a |
| Double (per semester) | $\$ 1,780$ | $\$ 1,850$ |
| Triple (per semester) | $\$ 1,190$ | $\$ 1,250$ |
| Campus Apartment / | $\$ 2,900$ |  |
| Resident (per semester) |  |  |

## Meal Plans:

| 300 meals + | $\$ 200$ | $\$ 1,444$ |
| :--- | :--- | :--- |
| 160 meals + | $\$ 300$ | $\$ 1,340$ |
| 90 meals + | $\$ 200$ | $\$ 719$ |
| 50 meals + | $\$ 300$ | $\$ 600$ |
| 0 meals + | $\$ 200$ | $\$ 200$ |
| 0 meals + | $\$ 100$ | $\$ 100$ |

Residents of on-campus apartments are required to participate in the " 0 Meals $+\$ 200$ dining dollar" Meal Plan. All other residents are required to participate in the "300 Meals + \$200 Dining Dollars" Meal Plan if they have less than thirty (30) credit hours earned, or a MINIMUM of the "160 Meals + \$300 Dining Dollars" Meal Plan if they have thirty (30) or more credit hours earned.

## Other Fees:

Orientation Fee
International Student
College of Business Course Fee: This
fee is required for all business courses except Business Orientation, Principles of Economics and Introduction to Statistical Analysis I.
College of Engineering Course Fee: This
fee is required for all engineering courses except Engineering Orientation.
College of Nursing Course Fee: This fee is required for AASN and all upper-division and graduate Nursing courses.
College of Health Information
Management Course Fee: This fee is required for HIMA 2030, HIMA 2350, HIMA 2400, HIMA 3010 and HIMA 3300.
College of Education Course Fee:
Physical Therapy Reservation Fee:
Occupational Therapy Reservation Fee: \$250
This fee is nonrefundable and will be
applied to a student's tuition upon

## \$40

\$30/semester; \$0 Summer
\$25/hr. (added)
\$25/hr.
\$25/hr.
\$75/lab course
\$25/credit hour \$250
\$250
enrollment into the program.
Dental Hygiene Clinic Fee: This is a fee for Dental Hygiene clinic classes.
Dental Hygiene Laboratory Fee: This fee is required for DHYG 1030, DHYG 1110 and DHYG 1040.

Dental Hygiene Mannequin Rental: This
is a rental fee for mannequins used by
Dental Hygiene students for pre-clinic laboratory.
Science Laboratory Fee: This fee is required for all Biology, Chemistry and Physics labs.
Cardio Respiratory Care Science Fee:
This is a fee for Cardio Respiratory clinic classes.
Book Bundle Fee: This fee is charged for textbooks for students who have accumulated less than 60 credit hours and are registered for 12 to 16 credit hours of general education core courses.

## Other Applicable Charges (Fees are subject to change without notice.)

## Application (non-refundable):

| Undergraduate | \$25 |
| :---: | :---: |
| Graduate | \$35 |
| Child Care per Term |  |
| Main Campus | \$110/wk. |
| Avon Williams Campus |  |
| First Child: | \$2.75/hr. |
| Each Additional Child: | \$2.50/hr. |
| Late Pick Up: | \$1/minute |
| Application: | \$5 |
| Class Audit: | same as for credit |
| Diploma Mailing Fee: | \$7.00 |
| Graduate Comprehensive Exam: | \$15.00 |
| Graduate Oral Exam: | \$15.00 |
| Success Program: | \$100.00 |
| Returned Check Charge: | \$30.00 |
| TSU Deferment Plan: | \$50.00 |
| Housing/Room Deposit (non-refundable) | \$100.00 |
| Damage Fee: | \$0.00-\$600.00 |
| I.D. Card Replacement (non-refundable): | \$10.00 |
| Incomplete Project Writing (after three semester hours): | \$25.00 |
| Incomplete Thesis Writing (after four semester hours): | \$25.00 |
| Late Registration Fee: | \$100.00 |
| Music, Voice and Instrument Lessons: | \$100.00/course |
| Employees Parking Pass Fee: | $\begin{aligned} & \$ 65.55 \text { (Incl. } \\ & \text { tax) } \end{aligned}$ |
| Premium Parking Pass Fee: | $\begin{aligned} & \text { \$163.88 (incl. } \\ & \operatorname{tax} \text { ) } \end{aligned}$ |
| Visitors Parking: | \$2.00/hr. |
| Proctored Test Fees: | \$25.00/hr. |
| Proctored test RODP (no additional fee) |  |
| Praxis Core Fee: \$85.00-one part; \$125two core tests registered at the same time payable to Praxis | \$135-combined test |
| Testing (non-refundable) |  |
| ACT (National) No Writing Fee: | \$38.00 |
| ACT Plus Writing Fee: payable to ACT | \$54.50 |
| Credit by Exam: | \$15.00/hr. |
| CLEP Test Fee: $\$ 80$ payable to CLEP and $\$ 28.50$ payable to TSU includes $\$ 3.50$ | \$108.50 |


| credit card processing fee; \$10.00 fee for <br> essay with Freshmen College Composition. |  |
| :--- | :--- |
| GED Fee: payable to Pearson Vue | $\$ 30.00 /$ module |
| HISET Fee: (\$50 payable to ETS; $\$ 25$ <br> center administration payable to TSU) | $\$ 75.00$ |
| Individual subtest Fee: initially is $\$ 20.00$ <br> per test (\$15.00 ETS fee and \$5.00 <br> payable to TSU). | $\$ 20.00$ per test |
| Retesting Fee: payable to TSU | $\$ 10$ per test |
| Score Report: | $\$ 10$ per report |
| DSST Fee: $\$ 80$ payable to DSST and <br> \$28.50 payable to TSU (includes $\$ 3.50$ <br> credit card processing fee) | $\$ 108.50$ |
| GRE Fee: General (payable to GRE) | $\$ 195.00$ |
| TOEFL Fee: payable to TOEFL | $\$ 185.00$ |
| NCLEX-RN Fee: $\$ 200$ payable to Pearson <br> Vue) Additional Licensure fees are <br> determined by the individual State Boards <br> of Nursing. | $\$ 200.00$ |
| A2 Admission Assessment BSN or AAS <br> Fee: (\$36.00 payable to Evolve and <br> $\$ 23.50$ payable to TSU includes $\$ 3.50$ <br> credit card processing fee) | $\$ 59.50$ |
| MCAT Fee: payable to MCAT | $\$ 275$ |
| Dental Hygiene Assessment Fee: <br> (\$36.00 payable to Evolve and $\$ 23.50$ <br> payable to TSU includes $\$ 3.50$ credit card <br> processing fee) | $\$ 59.50$ |
| Speech Pathology \& Audiology Courses (per term) |  |
| Diagnostic/Therapeutic Services Fee(s): | $\$ 0.00-\$ 65.00$ * |

*No charge for employees/students. Some patients on sliding fee scale.
NOTE: Additional charges may be assessed for courses that require materials and supplies in excess of the average required for other courses within the department.

## Application Fee

A one-time non-refundable fee of $\$ 25.00$ is charged to any individual who applies for undergraduate admission and $\$ 35.00$ for graduate admission. (Since these are one-time fees, there is no additional undergraduate reapplication fee and no additional graduate reapplication fee.)

## New Student Orientation Fee - \$40.00

A one-time non-refundable fee of $\$ 40.00$ is charged to undergraduates enrolled for 12 or more hours for credit their first semester (or 6 credit hours if the first enrollment occurs in a summer term). All other undergraduates are charged this one-time fee after they have accumulated 36 semester hours.

## Late Registration Fee - \$100.00

Students who complete registration during the late registration period will be charged a $\$ 100.00$ late fee.

## I.D. Card Replacement - \$10.00

Each student is issued an identification card which certifies that he/she is enrolled as a student at the University. There is no charge for the original card. A non-refundable fee of $\$ 10.00$ is required for replacement. This identification card bears the student's photograph and is required for registration, all financial transactions, library privileges, entrance to campus activities and other identification purposes.

## Program Service Fee

A fee is assessed for the following programs or services at an hourly rate: campus access, technology access, student activity, athletics, graduation, international education, debt service, student government, postal service, and health service.

## Returned Check Charge - \$30.00 Per Check

Students with proper identification may pay fees by personal check. Personal checks will not be accepted for students who have returned checks. A $\$ 30.00$ returned check fee will be assessed on all returned checks in addition to a \$100.00 late fee, if applicable.

## Library Fines

All fines imposed by the University Library become due to the University and must be paid at the Library or the Bursar's Office. Fines may be imposed for late return of books, lost or damaged books, or other related charges as specified by the Library.

## Class Audit Fees

Persons other than regularly-enrolled students may be permitted to audit classes with the approval of the course instructor. Such persons must follow regular registration procedures and pay fees equivalent to those required for courses taken for credit.

## Traffic Fines - \$15.00-\$200.00

All fines imposed by the University for parking and traffic violations must be remitted to the Bursar's Office.

## 65-Year-Old/Disabled Student Discounted Fee

In accordance with T.C.A. Section 49-7-113, persons 65 years of age or older and persons permanently and totally disabled who are domiciled in Tennessee may register for classes for credit on a space-available basis after regular registration is completed by paying a minimum registration fee. The fee is one-half the semester hourly rate, up to a maximum of $\$ 70.00$. No late fee is charged. An application fee may also be required. In addition, the applicant must be eligible for admission and submit proof of age or disability. Eligible persons are advised to check with the Office of Admissions prior to attempting to register for courses.

## Financial Regulations

No student is allowed to register or obtain grades, diplomas, degrees, or transcripts until all accounts are paid. A student is not officially enrolled until all fees are paid/or covered by appropriate third parties, and registration has been confirmed. Balances are subject to collection. The student is responsible for all attorney fees and other reasonable collection costs and charges necessary for the collection of any amount not paid when due. Any default on payments may be disclosed, along with other relevant information, to collection agencies and credit bureau organizations.

## Confirmations

All students including those who use deferments/aid to pay all or a part of their fees MUST CONFIRM (i.e., those with loans, grants, scholarships, state or disabled veterans' vocational rehabilitation benefits, veterans' benefits, certain veterans' dependents education benefits, senior citizen benefits to audit classes, staff scholarships, etc.). Confirmation affirms that students plan to attend the classes for which they are registered and gives the university permission to apply financial aid. Students who register/confirm and subsequently decide not to attend must drop all classes before the first day of classes to avoid a penalty. To confirm access myTSU at http://myTSU.tnstate.edu.

## Refund of Fees

Registration fees will be refunded for canceled classes and in the case of a student's death. No refund of rent, tuition, or other fees will be made to students who are dismissed or suspended.

## Fall and Spring Semesters

Students who withdraw from the University before the first day of classes will be refunded $100 \%$ of fees assessed.

Refunds are calculated based on liable credit hours during the $75 \%$ and $25 \%$ periods for the Fall and Spring terms. Therefore, in some instances, a refund may not be applicable. Students are encouraged to better plan their schedules and retain their full-time status on their way to a timely and successful graduation. Specific dates applying to each session are listed at http://www.tnstate.edu/bursar.

If you simultaneously drop a class and add a class on or after the first day of classes, please note that the add and the drop must be processed ON THE SAME DAY. If you are enrolled in one class and want to drop and add another, you must add first.
ROCC courses cannot be evenly exchanged with TSU courses when students drop/add on or after the first day of classes. ROCC classes can be identified by section number R50. ROCC courses are charged separately from TSU courses.

## Summer Session

The $75 \%$ and the $25 \%$ periods will extend a length of time that is the same proportion of the Summer sessions and Intersession as the $75 \%$ and $25 \%$ periods are of the regular terms. Students who have pre-registered for the second Summer session but drop or withdraw before the first day of class for Session II classes will be refunded 100\%. Otherwise, the regular refund schedule will apply. Specific dates applying to each session are listed at http://www.tnstate.edu/bursar.

## Refunds of Housing Expenses

## Rent:

Full rent will be refunded if:

1. The student is prevented from entering or returning to the University because of medical reasons confirmed in writing by a licensed physician.
2. The student is denied admittance or re-entry to the University or the residence halls.
3. Residence hall space is not available.

Refunds will be pro-rated on a weekly basis (a week is to consist of three days) when a student is forced to withdraw from a residence hall because of personal medical reasons confirmed in writing by a licensed physician or at the request of the University for other than disciplinary reasons.
Withdrawals for other reasons will be subject to the same 75\% $-25 \%$ policy as are refunds of enrollment fees. Specific dates applying to each session are listed at http://www.tnstate.edu/ bursar.

## Housing/Room Deposit

A $\$ 100.00$ non-refundable housing deposit is required for all students who apply for university housing. The non-refundable deposit is paid once a year to reserve an on-campus housing space for the upcoming academic year. The $\$ 100$ is deducted from the housing fee for the fall semester or whichever term is applicable. Charges for damage, defacement or missing fixtures and/or furnishings or cleaning in excess of the housing deposit will be assessed to the student.

## Appeals Procedures for Fees and Refunds

A student may appeal the assessment, application calculation, or interpretation of any University fee, charge, deposit, refund, or any University action connected with fees or charges. Questions should be discussed with personnel in the Bursar's

Office. If the student is not satisfied with the resolution of the problem offered by the Bursar's Office, a written appeal can be made to the Associate Vice President for Business and Finance, whose determination may be appealed to the President of the University. The decision of the President is final.

## All Student Financial Aid Recipients

A student who received Federal Financial Aid assistance and withdraws officially or unofficially from the university must return any unearned funds to the Student Financial Aid Programs. The institution must calculate the amount of the funds that were unearned, up through the 60\% point in each payment period or period of enrollment. A pro rata schedule will be used to determine how much SFA Program funds that a student has earned at the time of withdrawal.

NOTE: The amount of refundable (or balance outstanding) institutional charges will be set by the University policy. If there is a balance owed from these adjustments, the student is responsible for payment.

## Financial Aid

Tennessee State University has a broad based financial aid program. Therefore, an applicant may apply for and receive aid from one or more programs at the same time. Since the University cannot supply funds to cover the financial need of all its students, students are urged to investigate and seek aid from outside sources. Fair and equal consideration is given to all applicants without regard to race, color, sex, disability, or religious beliefs. The financial aid office is located in the Floyd/Payne Campus Center Suite 343 (615) 963-5701.
All students who wish to be considered for federal financial aid are required to complete the Free Application for Federal Student Aid (FAFSA). This application is available online at www.fafsa.ed.gov. To be eligible for Title IV Programs a student must:

- Meet program eligibility requirements
- Be enrolled or accepted for enrollment in a degree seeking program
- Comply with selective service and anti-drug requirements
- Not be in default on a student loan or owe a repayment to a Federal Title IV Program
- Make Satisfactory Academic Progress


## Sources of Federal Aid

Federal Work Study Program - Provides part-time employment on campus and in off-campus community service organizations.

Federal Supplemental Educational Opportunity Grant Program - Provides federally funded grants to our neediest students until funds are expended.
Federal Teacher Education Assistance for College and Higher Education (TEACH) Grant Program - Provides federally funded grants for students who have a 3.25 minimum GPA and are fully admitted to the Teacher Education Program. Recipients are required to teach full time for at least four years within eight years of completing their program of study as a (1) highly qualified teacher; (2) at a Title I school; (3) in a specified subject area (mathematics, science, a foreign language, bilingual education, special education, as a reading specialist, or other high-need field). Failure to complete the teaching requirement results in grant being converted into a Direct Unsubsidized Loan.
Federal Perkins Loan Program - Provides low interest loans to eligible students until available funds are expended.
Federal Pell Grant Program - Provides entitlement grants to eligible students.
Federal Direct Student Loan Program - Provides low interest loans from the Department of Education.

Tennessee Student Assistance Award - Provides grants to assist undergraduate Tennessee students in financing a postsecondary education. Must complete the Free Application for Federal Student Aid. Awards are made by the Tennessee Student Assistance Corporation until state appropriated funds are expended.
Parent Loans for Undergraduate Students (PLUS) - Provides loans to parents of undergraduate dependent students directly from the Department of Education.
Tennessee Educational Lottery Scholarship - Provides scholarships to Tennessee residents who meet specific requirements (see our website www.tnstate.edu/finaid for link to requirements). As a Tennessee Lottery Scholarship recipient you are required to remain in school on a continuous basis to stay eligible. If you enroll and withdraw or change your enrollment status anytime during the semester, you risk losing future eligibility.

## Standards of Satisfactory Academic Progress for Financial Aid

Satisfactory Academic Progress Overview: Federal regulations require that all federal financial aid recipients be enrolled in a degree-seeking program, be taking courses required for that program and maintain satisfactory academic progress (SAP) toward their degree to maintain eligibility. Tennessee State University complies with this requirement by monitoring each student's academic progress against three standards: cumulative grade point average (GPA), completion rate and maximum time frame for completion of a degree, consistent with the provisions of this policy. All federal and state financial aid programs administered by Tennessee State University are governed by this policy.
Satisfactory Academic Progress Standard Measurements:
Cumulative Grade Point Average (GPA)
A student is in violation of maintaining SAP for financial aid purposes if he/she:

- has a cumulative GPA of less than 1.5 for $0-15$ attempted hours
- has a cumulative GPA of less than 1.7 for 16-30 attempted hours
- has a cumulative GPA of less than 1.8 for 31-45 attempted hours
- has a cumulative GPA of less than 1.9 for 46-59 attempted hours
- has a cumulative GPA of less than 2.0 for 60 or more attempted hours
- has a cumulative GPA of less than 2.0 if pursuing a second bachelor's degree (including all undergraduate courses as recorded by the Records Office)
- has a cumulative GPA of less than 3.0 if pursuing a graduate degree


## Completion Rate

Students must earn $66.7 \%$ of their total attempted credits to remain eligible for federal and state financial aid, including Stafford Loans.

## Time Limitations

For an undergraduate degree, students are allowed to attempt up to $150 \%$ of the number of hours required for that degree which is 180 attempted hours (college level course hours, excludes remedial hours).
For graduate degrees, students are allowed to attempt up to $150 \%$ of the number of hours required for that degree as published in the Tennessee State University Graduate Catalog.

## Loss of Financial Aid Eligibility

Satisfactory Academic Progress will be measured annually at the end of each SPRING term. Students who are not in compliance with the cumulative GPA and/or completion rate or $150 \%$ time limitation standards will lose eligibility for Title IV aid (grants, loans, work-study), state funded programs, and any other aid programs requiring that students meet SAP standards. Students who were previously placed on ACADEMIC PLANS will be measured at the end of each term. Failure to meet the requirements of your plan will result in loss of eligibility for aid. Students may appeal their suspension if not already on an Academic Plan. If a student fails to meet the provision of his/her Academic Plan appeal, second appeals will only be considered for unforeseeable, unavoidable situations that occur during the term student is on plan. These will be reviewed on a case by case basis for consideration.

## Review, Notification and Appeal Process

Effective May 2014, Satisfactory Academic Progress will be measured ANNUALLY at the end of each spring term for everyone and at the end of each term for those on Academic Plans. Students will be notified via letter, email and on "myTSU" if they are in violation of the standards. Students who are in violation of the GPA and/or Completion Rate Standards AND have not been previously granted continued eligibility on an academic plan will have the opportunity to appeal to the financial aid SAP committee. The SAP appeal must include a letter explaining the circumstances surrounding the violation along with supporting documentation and a program of study prepared and signed by the student's academic advisor. Those who are in violation of the time limitation rule may appeal to the Director of Financial Aid. Time limitation appeals must include a graduation plan signed by the student's academic advisor or major department representative. Satisfactory academic progress guidelines are reviewed annually and updated based on institutional policy and/or federal regulatory changes.

## Academic Plans for Continuing Financial Aid Eligibility

Tennessee State University has instituted an academic plan program to allow students who violate the financial aid satisfactory academic progress standards to continue their aid eligibility if they meet certain requirements. Students who can complete their program of study within the 150\% timeframe may be allowed to participate. Academic plans allow financial recipients to have their academic progress measured on a semester by semester basis rather than cumulatively. Academic plan requirements are more stringent than the published standard. The conditions for students who are granted aid continuation based on academic plans are:

## Academic Plan for Grade Point Average (APGPA)

Students who violate the satisfactory academic progress guidelines due to cumulative GPA agree to maintain a 2.25 semester for each semester they are on the academic plan until such a time that the student's cumulative GPA meets the published standard.

## Academic Plan for Completion Rate (Attempted Hours vs. Completed Hours APHRS)

Students who violate the satisfactory academic progress guidelines due to not successfully completing $66.7 \%$ of all attempted hours agree to complete $75 \%$ of all attempted hours for each semester they are on the academic plan until such a
time the overall completion rate meets or exceeds the 66.7\% benchmark.

## Academic Plan for Grade Point Average and Completion Rate (APBTH)

Students who violate the satisfactory academic progress guidelines due to not maintaining the required cumulative GPA AND not successfully completing $66.7 \%$ of all attempted hours agree to maintain a 2.25 GPA AND complete $75 \%$ of all attempted hours for each semester they are on the academic plan until such a time that the student's cumulative GPA meets the published standard and overall completion rate meets or exceeds the $66.7 \%$ benchmark.

Due to U.S. Department of Education requirements for University's electing to allow participation in academic plans for financial aid, appeals will not be accepted. Violation of your plans agreement will result in the loss of your financial, including student loans, until you raise your GPA, completion rate or both and are able to meet the minimum standards.

## All Financial Aid Recipients

Enrollment is measured on the 14th day of class for financial aid purposes. Financial Aid is adjusted based on the actual enrollment on this date. A student who received Federal Financial Aid assistance and withdraws completely officially or unofficially from the university must return any unearned funds to the Student Financial Aid Programs. The institution must calculate the amount of the funds that were unearned, up through the $60 \%$ point in each payment period or period of enrollment. A pro rata schedule will be used to determine how much SFA Program funds that a student has earned at the time of withdrawal. NOTE: The amount of refundable (or balance outstanding) institutional charges will be set by the University policy. If there is a balance owed from these adjustments, the student is responsible for payment. Students must regularly attend courses pursuant to the attendance policy of the University and individual instructor. Failure to attend courses for which you have been paid aid may result in adjustments to your financial aid awards.

## Glossary

Academic Good Standing: An indication that a student meets or exceeds minimum academic requirements to be enrolled at the University.
Academic Probation: An indication of marginal academic performance. A warning that a student is in jeopardy of losing academic good standing.
Accreditation: Recognition granted to schools and colleges by interested professional agencies upon examination by groups of visiting professionals based upon objective standards. An accredited school or college has measured up to the standards of quality imposed by professional groups and accrediting agencies.
College: Part of the University offering a wide selection or a specialized group of courses leading to a variety of degrees. A large body of faculty having a common purpose or common duties in instruction, research, scholarship, and public service
that grants bachelor's and graduate degrees. TSU has four units so designated-Liberal Arts, Business, Education, and Engineering.
Curriculum: The total program of courses required for a degree in a particular subject.
Credit Hours: Generally the number of hours a course meets each week determines its worth in credit hours.

Deans: The administrative department chair of a school, college or academic related or student related unit within the University. Academic related deans report to the Vice President for Academic Affairs

Department Chairs: Persons in charge of providing administrative and academic leadership for a department within the University (i.e. the Department Chair of the Art Department).
Elective: A course that is accepted toward fulfillment of credit for a degree, but is not required for that degree. It is so termed because a student "elects" or chooses to take the course.
Evaluation: Any credit for academic work completed at another institution and transferred to TSU must be evaluated in terms of the requirements of TSU. Such evaluation is done by the Records Office.

Full-time Student: A student who registers for 12 or more credits each semester.
Grade-point average (GPA): A student's grade-point average may be computed numerically by dividing the number of quality points earned by the number of hours of course work attempted.
Major: The academic area in which one specializes.
Matriculation: Enrollment in the University or a particular college or school. This includes payment of fees.
Minor: The academic area in which one places special emphasis as a secondary specialization.

## The Division of Student Affairs

## Purpose

The mission of the Division of Student Affairs is to provide services and opportunities in partnership with others to extend the learning environment and to help students develop skills for productive and fulfilling lives.

The Division of Student Affairs at Tennessee State University has three principal objectives.

1. To provide programs and services in support of academics as the principal mission of the University.
2. To enhance the intellectual, cultural, and social environment of the campus for the total development of students at the University.
3. To develop and administer various processes in the formulation of University policies to enhance the quality of student participation and student life at the University.
The University recognizes the diverse and varied educational objectives of its students and the need to offer programs and services designed to assist students in their decision-making and formulation of academic and co-curricular objectives. Tennessee State University, through its Division of Student Affairs, seeks to assist students in enhancing the effective use of the varied opportunities made available to them through the University experience.
Student services at Tennessee State University include the following units and organizations:

> Vice President for Student Affairs
> Associate Vice President for Student Affairs Assistant Vice President for Student Affairs Dean of Students and Chief Judicial Officer Counseling Center
> Career Development Center
> Wellness Center \& Floyd/Payne Campus Center
> Health Services
> Student Activities

Non-resident: A student who is not a resident of the State of Tennessee.
Part-time Student: A student who registers for fewer than 12 credit hours a semester.
Prerequisite: A course that must be completed before another may be attempted. Such first courses are said to be prerequisites for following courses in the same or similar areas. It is the student's responsibility to check for prerequisites in the current catalog.
School: A particular division of the University. The school is organized according to faculty who provides instruction and grant degrees in the same or related disciplines. TSU has a Graduate School and three undergraduate schools: Agriculture and Family and Consumer Sciences, Allied Health Professions, and Nursing.
Semester Hour of Credit: The semester hour is a unit of academic credit. A student, for example, must earn a minimum of 130 semester hours in order to graduate. The number of hours earned in a given semester is the measure of a student's academic load. A normal load ranges from 12 to 18 semester hours of work. The hours of credit of various courses are indicated in the catalog.
Transcript of Credit: A certified copy of credits which a student has earned in high school or in colleges attended. The submission of a transcript is one of the most important prerequisites for admission to the University.

## On-Campus Accommodations

The mission of the Department of Residence Life is to provide a comfortable living and learning environment, which contributes to healthful living and academic growth and whichrepresents the core of our department's programming and plans. As an enhancement, programming within the department is used to foster a community within university housing. The University provides six residence halls and two apartment complexes: two for men, three for women and three for co-ed. Each resident is held responsible for knowing and abiding by the rules and regulations for residence hall/center/apartment living. All residential facilities are staffed with a residence director, assistant director and student residence assistants. The staff is responsible for the operation of the hall, center and apartment under the supervision of the director of residence life.

## Disability Services Residence Life TSU Police Department

The Directors/Coordinators of these units constitute the Council on Student Affairs which is administratively responsible to the Office of the Vice President for Student Affairs. The Vice President for Student Affairs reports directly to the President of the University and is vested with the authority for resolving all contested issues within the realm of student services, subject to final appeal to the President of the University. In addition to these offices and programs, there are standing committees assisting the University in policy development and administration. These include the StudentFaculty Advisory Committee, Committee on Scholarships and Awards, and Faculty Advisory Committee on Sororities and Fraternities.

The University is committed to the concept of student involvement and input in the formulation and development of University policies, programs and activities. In addition to student participation on committees at the University, there is an active Student Government Association.
Other organizations specifically include the Student Union Board of Governors, Student General Assembly, Student Publications Board, Pan-Hellenic Council, Student Election Commission and many diverse and varied academic and nonacademic clubs and organizations.

## Room and Board

Students who live in residence halls are required to take their meals in the University Cafeteria. Charges for room and board are made on a semester basis and are payable at the beginning of each semester. A charge will be made for the replacement of a meal card, key or access control device (FOB) in the event it is lost, misplaced or stolen during the semester.

## Room Reservation Fee

A room reservation fee is required for all students who apply for all campus housing. The fee is paid when you apply or renew housing. This is a non-refundable fee. The room reservation fee is applied to the housing charges upon checkin.

## Food Service

The University provides food service for students. Three meals are served each day Monday through Friday, and two meals are served on Saturday and Sunday. The University Cafeteria is located in the Otis L. Floyd-Joseph A. Payne Campus Center which seats 700 students There is a Snack Bar (Pizza Hut/Chick-fil-A) on the second floor of the Campus Center.

## Co-ed Residence Hall/Center

Harriett Hale Hall is a co-educational honors residence hall which houses upper-class men and women. It is a six-story, air conditioned facility; each room is semi-private. The hall is equipped with an access control system, a combination barber/beauty salon, lounges, laundry room, computer lab, telephone services, basic cable, wireless internet service an elevator, and apartments for the professional staff.
Harold E. Ford and John N. Ford Residential Complex is a co-educational residence center which houses upper-class men and women. The center consists of 122, two and four bedroom apartments. The apartments have either a patio or balcony. Each unit has fully furnished living, dining, and kitchen areas. The unit includes water, heating, electricity and air with one full bath in the two bedroom units and two full baths in four bedroom units. Each student has his/her own bedroom with a personal phone line and computer data hookup, basic cable, wireless internet service, a twin bed, desk, chair, a chest, and closet space. The complex is supervised by a professional staff. The complex includes a community center that houses the main office, computer lab, barber/beauty salon, and an exercise room. Outdoor basketball and volleyball courts are also available along with grilling areas for cook-outs. There are residential parking areas and bicycle racks.
New Residence Complex is a co-educational residence center which houses upper-class men and women. The center consists of 72 four bedroom apartments. The apartments have either a patio or balcony. Each unit has fully furnished living, dining, and kitchen areas. The rent includes water, heating, electricity and air with two full baths in each unit. Each student has his/her own bedroom with a personal phone line and computer data hook-up, basic cable, wireless internet service, a twin bed, desk, chair, a chest of drawers, and closet space. The complex is supervised by a professional staff. The complex includes a community center that houses the main office, computer lab, barber/beauty salon, and an exercise
room, outdoor basketball courts. There are residential parking areas.

## Residence Halls For Men

Lena B. Watson Residence Hall for freshman men is a sixstory, air-conditioned facility. This facility is equipped with an access control system, a lounge, academic center, computer labs, a recreation/study area, laundry room, and telephone services, basic cable, wireless internet service and apartments for the professional staff.

Henry Allen Boyd Hall for upper-class men is a seven-story, air conditioned facility equipped. This facility is equipped with an access control system, a lounge, recreational/study area, laundry room, computer lab, and telephone services, basic cable, wireless internet service and apartments for the professional staff.

## Residence Halls For Women

Merl R. Eppse Hall for upper-class students is a six-story, airconditioned facility. This facility is equipped with an access control system, a lounge, recreation/study area, laundry room, computer lab, telephone services, basic cable, wireless internet service and apartments for the professional staff.
Mary Wilson Hall is an air conditioned, six-story facility that houses freshman women. This facility is equipped with an access control system, study lounges, academic center, computer lab, telephone services, basic cable, wireless internet service as well as apartments for the professional staff.
Wilma Rudolph Residence Center is a six-story facility that houses upper-class women. The suite style rooms are arranged for double occupancy. This facility is equipped with an access control system, study lounges, beauty salon, telephone services, basic cable, wireless internet service and apartments for the professional staff.

## University Counseling Center

The mission of the University Counseling Center is to provide counseling services to students and to collaborate with other campus-learning partners to effectively promote educational quality and attainment. The Counseling Center encourages the development of the fully functioning individual in the academic environment and the community by engaging in a holistic approach. Professional counselors are available to meet with students on either an individual or small group basis without referral. Confidentiality is maintained and appointments can be made in person or by telephone.
All currently enrolled Tennessee State University students are eligible to receive counseling services free of charge. A psychiatrist is also available (upon referral) for students. Consultation services with the university psychiatrist are also free of charge, but students are responsible for prescriptions. Students who do not have health insurance are encouraged to obtain insurance through the university. Information regarding student health insurance is available at the Student Health Center.

The University Counseling Center staff speaks to various orientation classes and at residence centers. Seminars are also available upon request. The Counseling Center provides both solution focused short-term counseling as well as longerterm care.

Confidentiality and strict adherence to professional ethical standards are maintained and emphasized.

Location: Student Success Center/LRC

## Suite 114

Main Campus
Telephone: 615-963-5611

## Student Activities

The mission of the Office of Student Activities at Tennessee State University is to provide programs and services that enrich students' intellectual, ethical and social development. The office provides and supports programs that promote learning opportunities in personal growth, self-governance, social responsibility, and leadership development while assisting in the retention and ultimate graduation of students.

Student Activities are coordinated by the Director of Student Activities. Admission to most campus activities is by a valid Tennessee State University Identification Card.

Participation in organizations may serve to develop special talents and skills in music, dramatics, writing and religious expression or to develop an appreciation and capacity for leadership, cooperation and fellowship. In making a choice of organizations, the student should consider his/her interests, health, scholarship, finances, and home relations. Freshmen are urged to limit their participation in organizations and other extra-curricular activities during the first semester when numerous academic, social, and other adjustments have to be made.

Location: Floyd/Payne Campus Center
Second Floor - Suite 217
963-5250

## Intercollegiate Athletics

The University recognizes the need for a well-rounded program of athletics for all students. In this regard, Tennessee State University competes on an intercollegiate basis in football, basketball, golf, track and field, cross country, tennis, softball and women's volleyball.

The University is a member of the National Collegiate Athletic Association and the Ohio Valley Conference (OVC).

## The Student Handbook

The Student Handbook is a means of facilitating communication among the members of the University. It presents the official statements of policy rules and regulations which direct student life at Tennessee State University.

## Campus Police

The mission of the Tennessee State University Police Department is to provide a safe and secure educational environment through collaborative interaction with students, faculty and staff recognizing the multicultural and diverse university community.
TSU police department is responsible for providing 24-hour police services, a proactive environment for crime prevention an atmosphere conducive to learning and social diversity, and facilitating the community policing concept to encourage student involvement in the protection of property and life.

## Career Development Center

The TSU Career Development Center assists students in pursuing their career goals by providing them with a myriad of opportunities and empowering them to successfully compete in the global environment. Our services include career advising using the 16 Career Clusters model, professional development, job search strategies and experiential learning. These services are free to all students and alumni of the University.

Our center hosts Tiger Track, an on-line job posting site, where students can review job postings for full-time, part-time and experiential learning (internships, cooperative education, etc.) positions, in addition to posting their resumes and creating electronic portfolios. Tiger Track is an outstanding resource that can be used by graduate students and alumni throughout their working lives. Students can get started by logging onto the TSU Career Development Center at www.tnstate.edu/careers and requesting access today!

Students may also visit our office located in the Campus Center, Suite 304, contact us via phone at 615-963-5981 or via e-mail at careerdevelopmentcenter@tnstate.edu.

## Cooperative Education

Cooperative education is an academic support program that assists students in gaining practical work experience related to their academic major as an optional part of their academic program. The program permits students to get involved in the practical application of academic theory learned in the classroom. Students are awarded three hours of academic credit for each successfully completed co-op work experience.

## Graduate \& Professional Opportunities

The office targets students during their freshman year and tracks them throughout their matriculation. It is designed to equip students with the tools necessary to make informed decisions about opportunities for educational advancement. The office supports students through a variety of services and activities, including its annual Graduate \& Professional School Fair; Graduate School Workshops, Personal Statement Workshops; Campus Visitation Programs; Standardized Tests Preparation Programs; sponsoring informational awareness in law, medicine, business, and graduate studies; and providing academic counseling to interested students and alumni.

Career Development Center Office Location:
Floyd-Payne Campus Center 3500 John A. Merritt Blvd, Suite 304

Nashville, TN 37209
(615) 963-5981

## Student Conduct and Mediation Services

The mission of the Office of Student Conduct and Mediation Services is to provide a full range of services to assist and counsel students in resolving their disputes and conflicts in a way that facilitates learning, individual responsibility, and students' professional growth and development. The Office of Student Conduct and Mediation Services also provides learning opportunities through educational sanctions that encourage behavioral change and assist students with their ability to make decisions that promote success in their academic and professional careers. The Chief Judicial Officer for the University interprets and provides disciplinary guidance for the entire student body, based upon the policies and procedures set forth in the Student Handbook.

Responsibilities:

1. Interprets and enforces institutional disciplinary policies as set forth in the Student Handbook.
2. Assesses special needs of students and recommends necessary action (s) to the Vice President of Student Affairs.
3. Provides educational and social programming for students taking courses at the Avon Williams Campus.
4. Supervises and provides guidance for staff.

Location: Floyd/Payne Campus Center (Kean Hall), First Floor - Suite 103, (615) 963-4891

## Policy On ID Cards

The TSU Identification Card is your official University identification for library privileges, cafeteria plans, athletic events and any other University functions or services that you may be entitled to receive as a University student. The card also serves as a debit card for financial aid refunds and as a cash card for vending services on campus. The card must be carried at all times. Further information about this card is available in the brochure "TSU ID Card" available in the ID Center, McCord Hall 17.

The first card is provided to students after payment of the first semester tuition and fees. The procedure for lost/stolen cards is:

1. Student MUST first call the ID Center (615) 963-5311 or drop by McCord Hall 17 to report the loss; this will initiate the canceling of the old card and creation of a new card. New cards take up to two hours to be created.
2. Pay a $\$ 10.00$ non-refundable fee to Cashier's Office to replace the lost card, a receipt will be issued.
3. Return to the ID Center with the receipt to receive the replacement card. The replacement card will not be available for up to two hours after initially reporting it lost/stolen. Damaged cards also require a $\$ 10.00$ non-refundable fee for replacement.

Lending this card to anyone or failure to present it when requested by University officials is a violation of University regulations and subjects the holder to disciplinary action.

## Otis L. Floyd-Joseph A. Payne Campus Center

As a significant part of the educational program, the Otis L. Floyd-Joseph A. Payne Campus Center provides the services, offices, activities, events, recreation and conveniences to meet the daily needs of the university's family; with 229,253 square feet of floor space, the three level arena is an accommodating facility to Tennessee State University. The building is designed to be the center of student activity. Located on the second floor, the center represents the heartbeat of the plan to substantially enhance the institution's environment.

## Hours of Operation

Information Desk:

| Monday-Friday | 7:00 a.m. $-11: 00$ p.m. |
| :--- | :--- |
| Saturday | 9:00 a.m. $-11: 00$ p.m. |
| Sunday | 9:00 a.m. $-11: 00$ p.m. |

## Intramural and Recreational Sports Program <br> (615) 963-5662 / (615) 963-5663

The intramural and recreational sports program offers a wide range of sports and other activities to meet the diverse interests of the students, faculty, and staff populations. The recreation department values student involvement in its
decision-making and program development. The program has an underlying mission of "something for everyone."

The division of student affairs recognizes that the intramural and recreational sports program will help develop leadership, self-esteem, and good social adjustment. An outdoor recreation center is being developed at the university. It will be anchored by the new tennis complex and include most of the areas on the north campus. Outdoor recreation will include archery, basketball (outdoors), football, fishing, cycling, canoeing, hiking, and track. All other games such as billiards, board games, card games, volleyball, and wall climbing are played in Kean Hall. (Intramural and Recreation Sports Program is located in Kean Hall, Room 028. Hours of operation are Monday-Friday (10:00 a.m. to 10:30 p.m.) and Saturday and Sunday (1:00 p.m. to 10:30 p.m.).

## Student Health Services <br> (615) 963-5291

Student Health Services is maintained to safeguard the health of students. The University provides these services through the Floyd Payne Campus Center. Services are available from 8:00 a.m. to 8:00 p.m. Monday through Thursday and 8:00 a.m. through 4:30 p.m. on Friday. Services include first aid, emergency services, counseling on health problems, referrals, and the communication of pertinent information to consulting physicians, hospitals, clinics and other agencies.
Clinics are held daily, Monday through Friday. No charges are made for first aid and drugs used in simple treatment. Students are hospitalized at local hospitals of their choice (at their own expense). The University accepts no responsibility for any student requiring hospitalization. Therefore, students are strongly encouraged to enroll in the student health insurance program. Insurance enrollment information is located in the Student Health Center and Student Affairs Offices.

## Disability Services

The Disability Services (DS) Office at Tennessee State University is established to raise the level of educational development for students with disabilities and to improve the understanding and support from the University Community for these students. Services range from providing physical accommodations on campus to helping students with learning disabilities succeed in classroom activities. Additionally, the office attempts to:
Raise the level of educational development for students with disabilities.
a. Improve understanding of and support from the University community for students with disabilities.
b. Place emphasis on orientation and survival skills for new students and others who might benefit from these experiences.
c. Monitor development of the physical plant to ensure accessibility and opportunity for students with disabilities.
d. Help faculty and staff better understand physical and learning disabilities and provide them with effective methods of working with students with disabilities.
e. Use every available opportunity to advocate for special needs of students with disabilities and seek a means to obtain those services
f. For further information, contact Disability Services in room 117 in the Campus Center (phone: 615-9637400).

# The Division of Enrollment Management 

Undergraduate Admission

All inquiries about admission, applications for admission, and transcripts of credit should be addressed to the Director of Undergraduate Admissions, Tennessee State University, 3500 John Merritt Blvd., Nashville, TN 37209-1561.

## Freshman Admission

Applicants for admission to the freshman class should submit their application materials as early as possible in their senior year of high school.

Applicants should request high schools to send transcripts including all semesters of high school credits as soon as grades are available. Applicants are requested to furnish supplementary records such as official high school transcripts showing proof of graduation and receipt of a diploma immediately following graduation. The high school transcript of Tennessee public high school graduates must also have proof that required proficiency examinations have been passed.
The State of Tennessee as of July 1, 1998 requires new students and readmitted full-time students to provide proof of two doses of immunization with Measles, Mumps, and Rubella (MMR) vaccines administered on or after their first birthday, unless they graduated from a Tennessee public high school in 1999 or later. Immunization forms will be mailed out to admitted students with their acceptance letter. An applicant will not be allowed to register for courses until the immunization requirements above are submitted.
Admission will be granted to freshmen applicants who meet regular admission requirements and who hold a recognized high school diploma that includes a distribution of college preparatory courses, such as those required in the core elements of the Tennessee High School Diploma. These courses include the following:

## English - 4 Units

Visual and/or Performing Arts, including a survey course or participation in one or more of the arts (music, dance, theatre, visual arts) - 1 Unit
Algebra I and II - 2 Units
Geometry or other advanced math course with geometry as a major component - 1 Unit
Additional Unit of Math - 1 Unit
Natural/Physical Sciences, including at least one unit, with lab, of Biology or Technology, chemistry, physics or Principles of Technology II - 3 Units
Social Studies, including world history, ancient history, modern history, world geography, European History - 1 Unit
*United States History - 1 Unit
A single Foreign Language - 2 Units
*Required by Tennessee Code Annotated 49-7-110. Students deficient in the completion of United States History are required to complete six semester hours of Unites State History or three semester hours of United State History and three semester hours of Tennessee History.
Additional First-time Freshmen General Requirements

1. All students are required to submit an application for admission and a $\$ 25$ non-refundable processing fee. Fee waivers are not accepted as a substitute for the processing fee.
2. Any student desiring admission without conditions must have submitted an application, an application fee, and all documents (transcripts and ACT/SAT Test Scores) at least 45 days prior to the semester of intent.
3. All graduates of nonpublic high schools (i.e., private schools, home schools, and church related schools) must submit an official transcript from an affiliated organization as defined by law T.C.A. 49-50-801or be accompanied by a certification of registration with the superintendent of the local education agency which the student would have otherwise attended. Applicants who cannot provide a satisfactory secondary school credential must provide acceptable scores on the examination.

## Regular Admission In-State

For regular admissions, an applicant must meet the following requirements 2015-2017:
a. ACT Score of 19 or 900 and above on the SAT, or
b. Minimum grade point average of 2.25 on a 4.00 system and
c. Must pass the Tennessee Proficiency Examination, and
d. Students who take the ACT: Subscores in English, Math, and Reading must be 13 or higher in 2 out of 3 of the subject areas; Students who take the SAT: Verbal Sub-Score must be 340 or higher and Math Subscore must be 270 or higher

NOTE 1: ACT or SAT scores are required of all students under 21 years of age for advisement and placement purposes.
NOTE 2: An applicant over the age of 21, who fails to meet the required grade point average may be admitted by attaining the required ACT score of 19.
NOTE 3: Residency classification for fee-paying purposes determines whether the applicant is in-state or out-of-state. The children of graduates who live out-ofstate are governed by in-state admissions requirements but are required to pay out-of-state tuition.

## Regular Admissions Out-of-State

For regular admissions, an applicant must meet the following requirements for 2015-2017.
a. ACT Score of 19 or 900 and above on the SAT, or
b. Minimum grade point average of 2.50 on a 4.00 system and
c. Students who take the ACT: Subscores in English, Math, and Reading must be 13 or higher in 2 out of 3 of the subject areas; Students who take the SAT: Verbal Sub-Score must be 340 or higher and Math Subscore must be 270 or higher
NOTE 1: ACT or SAT scores are required of all students under 21 years of age for advisement and placement purposes.
NOTE 2: An applicant over the age of 21, who fails to meet the required grade point average may be admitted by attaining the required ACT score 19.
NOTE 3: Residency classification for fee-paying purposes determines whether the applicant is in-state or out-of-state. The children of graduates who live out-of-state are governed by in-state admissions requirements but are required to pay out-of-state tuition.

1. Applicants will be given consideration for admission on a regulated basis if they meet the following requirements:
a. completed all State Board of Regents high school units but do not meet the required grade point average and/or test score;
b. deficient no more than two State Board of Regents high school units but meet and/or exceed an acceptable grade point average and/or test score.
2. Applicants admitted under regulated status must complete courses specified with grades of "C" or better. Such specified courses must be completed in
the first two semesters and first summer of enrollment in order for the student to be continued in the University.
3. Such regulated admissions must have the approval of the Director of Admissions. The number of students permitted to enroll in this category will not exceed five percent (5\%) of the total number of firsttime freshmen admitted in any given term, or 100 students, whichever is greater.

## Admission Based on GED Test:

Any applicant desiring admission based on the General Education Development Test must meet the following requirements:
a. Be 18 years of age.
b. Submit a GED Report showing a composite score of 600 or above ( 45 prior to January 2002 or 450 from January 2002-December 2013) with a passing notation.
c. Take the ACT/SAT. Applicants who are under 21 years of age and meet the required GED score must take the ACT/SAT.
d. GED recipients who are 21 or older must take the COMPASS.

## Admission Based on HiSet (HSE):

Any applicant desiring admission based on the General Education Development Test must meet the following requirements:
a. Be 18 years of age.
b. Submit a HiSet showing a composite score of 45 or above with a passing notation.
c. Take the ACT/SAT. Applicants under 21 years of age and who meet the required HiSet score must take the ACT/SAT.
d. HiSet recipients who are 21 or older must take the COMPASS.

## Placement

All first-time freshman students under the age of twenty-one are required to submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores as a condition for admission. ACT scores in Reading, Math and English are used to determine placement in college-level courses with or without learning support. First-time students over the age of twenty-one who do not have a valid ACT will take COMPASS for placement purposes. Diagnostic testing may also be required to determine learning support requirements.

Transfer students who have not been previously assessed and who have not earned credits in college-level English composition or college-level, algebra-based mathematics must undergo COMPASS assessment in the appropriate area(s). Transfer students are not required to submit ACT/SAT scores, although they are encouraged to do so if they have valid scores, although they are encouraged to do so if they have valid scores. Diagnostic testing may also be required to determine learning support requirements.

Non-degree students who have not completed the first college-level course in English or mathematics must undergo COMPASS assessment in the appropriate subject area in order to determine requirements for learning support with the college-level course.

Students who are placed according to their ACT scores are exempt from COMPASS testing. Failure to abide by ACT or COMPASS placement will not be used as a basis for waiving requirements.

If there are extenuating circumstances, a student may retake the COMPASS for a fee of \$20, providing the student has taken no course work in the retest area.

## Advanced Placement Credit

The University will award advanced standing to entering freshmen based upon Advanced Placement Examination results. Scores of 3 to 5 will be awarded appropriate credit.

Official copies of the Examination scores must be submitted by the testing agency to the Office of Admissions and Records. Refer to the following chart for credits awarded:

| SUBJECT | COURSE(S) | SCORE | CR. |
| :---: | :---: | :---: | :---: |
| History of Art | Art 1012 | 3,4 | 3 |
| Biology | BIOL 1010, 1020 or 1030 w/lab | 3 | 4 |
|  | BIOL 1110 \& 1120 w/lab | 4,5 | 8 |
| Chemistry | CHEM 1010 w/lab | 3 | 3 |
| Lang \& Comp. | ENGL 1010 | 3 | 3 |
|  | ENGL 1010 \& 1020 | 4,5 | 6 |
| French | FREN 1010 | 3 | 3 |
|  | FREN 1010 \& 1020 | 4,5 | 6 |
| Gov't Politics | POLI 2010 | 3 | 3 |
| Comparative | POLI 2010 \& 2040 | 4,5 | 6 |
| European HIST | HIST Elective | 3 | 3 |
|  | HIST Elective | 4,5 | 6 |
| United States | HIST 2010 | 3 | 3 |
|  | HIST 2010 \& 2020 | 4,5 | 6 |
| World History | HIST 1220 | 3 | 3 |
|  | HIST 1220 \& 2022 | 4,5 | 6 |
| Calculus (ab) | MATH 1830 | 3 | 3 |
|  | MATH 1830 \& 1140 | 4,5 | 6 |
| Calculus (bc) | MATH 1830 \& 1140 | 3 | 3 |
|  | $\begin{aligned} & \text { MATH } \\ & 1710 \end{aligned}$ | 4,5 | 9 |
| Theory | MUSC 1010 | 3,4,5 | 2 |
| Listen \& Lit. | MUSC 140 | 3 | 3 |
|  | MUSC 1010 \& 1400 | 4,5 | 5 |
| Physics <br> (B) Mechanics | PHYS 2010 w/lab | 3 | 3 |
|  | PHYS 2010 \& 2030 w/lab | 4,5 | 6 |
|  | PHYS 2010 w/lab | 3 | 3 |
| (C) Elect/Mag | PHYS 3110 \& 3120 | 4,5 | 8 |
| Language | SPAN 1010 | 3 | 3 |
|  | SPAN 1010 \& 1020 | 4,5 | 6 |
| Computer Sci | COMP 1210 | 3 | 3 |
| CS (A) | COMP 1210 | 3 | 3 |
| CS (AB) | COMP 1210 \& 2110 | 4,5 | 6 |
| Economics | ECON 2010 | 3 | 3 |
|  | ECON 2010 \& 2120 | 4,5 | 6 |
| Spanish | SPAN 1010 | 3 | 3 |
|  | SPAN 1010,1020 | 4,5 | 4,5 |
| Psychology | PSYC 2010 | 3 | 3 |
|  | PSYC 2010 \& 2100 | 4,5 | 6 |

## Required Testing

Any or all students may be required to take one or more tests designed to measure general education achievement and achievement in major areas as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for in an individual program, no minimum score or level or achievement is required for graduation. Participation in testing may be required of all students, of students in selected programs, and of students selected on a sample basis.

## Early Admission

Students who wish to begin college at the end of their junior year may qualify under the following conditions:

1. be at least 16 years of age;
2. have completed the junior year of high school with a minimum of 14 high school units;
3. have a 3.2 grade-point average on all work taken during grades 9,10 , and 11 ;
4. have a minimum ACT composite score of 22;
5. be recommended for participation in the program by either the high school principal or the guidance counselor;
6. taken and passed the Tennessee Proficiency Test.

## Dual Enrollment Policy

Tennessee State University (TSU) offers high school juniors and seniors the opportunity to earn transferable university credit by taking classes at the main campuses, at off-campus locations, via distance education or at their own high school. This program allows students to complete entry level college courses and have them count for both high school and college credit.

To be dually enrolled, an applicant must have completed their sophomore year in high school, be recommended by their high school principal or guidance counselor and have written parental permission, if the student is under 18 years of age. Students must complete the Tennessee State University admission process and must have taken the ACT, SAT, or PLAN prior to enrolling in the program (the COMPASS test cannot be administered to determine eligibility for this program). The PLAN will be used if the ACT or SAT has never been taken and the same ACT scores will be required on the PLAN.
Students must also meet the following minimum credentials:

- Minimum composite ACT score of 19 or equivalent SAT score
- Minimum English ACT subscore of 18 (if taking English)
- Minimum Math ACT subscore of 19 (if taking Math)
- Minimum admissions index score of 100 (30 times the cumulative high school GPA [ 4.0 scale] plus the ACT score) or
- Successful completion of at least seven (7) of the required high school units.
Students will be required to pay applicable tuition and fees for each course. To assist in defraying the cost of tuition and fees, students enrolling in a course for which college and high school credit will be earned are eligible for the dual lottery scholarship, which provides $\$ 100$ per semester credit, up to $\$ 300$ per term and $\$ 600$ per academic year. The application can be found at Tennessee Dual Enrollment Grant Application.


## Re-Admission

1. Students who leave the University voluntarily and who do not enroll for courses during one or more regular semesters must submit an application for readmission to the university. Summer is not considered a regular semester in determining absence from the University.
2. Students who return to TSU after attending other colleges or universities must submit an application for readmission and a transcript from all institutions attended since leaving TSU. Applicants in this category need a grade point average equal to TSU's retention standards when all courses attempted at all colleges are combined.
3. Re-enrollees who wish to attend TSU after being suspended should follow items 1 and 2 above as well as the following:
a. Students who receive their first suspension at the end of the fall semester may not register at TSU until the following summer.
b. Students receiving their first suspension at the end of the spring semester will not be eligible to re-enroll until the following spring semester.
c. Students receiving their first suspension at the end of the summer session will not be eligible to re-enroll until the following spring semester.
d. Students who attend another accredited institution during their suspension from TSU and raise their cumulative GPA to meet TSU's retention standards will be allowed to re-enroll at TSU.
4. In determining retention and re-enrollment, Summer I and Summer II grades will be as one term.

## Transfer Students

All students seeking advanced standing must submit official transcripts of all college credit earned. A student will be considered a transfer student if any college work has been taken at another institution.
All transfer applicants must:

1. Submit two official transcripts from each college/university attended.
2. Submit an official COMPASS report, if applicable.
3. Have a GPA (based on all courses attempted at Tennessee Board of Regents colleges/universities) equal to TSU's retention standards.
4. Have a minimum 2.00 GPA, for out-of-state college/university.
5. Take the COMPASS subtest in Mathematics and/or English if the ACT (Enhanced) subscore(s) in the subject(s) is not acceptable or if college credit has not been earned in English and/or Mathematics. Transfer students with 60 or more hours of transfer credit are exempt from University Orientation if they have not attempted Math and/or English.
6. Students who have taken remedial and/or developmental courses at a non-TBR institution must undergo COMPASS assessment. However, if they transfer remedial and/or developmental course work which is equivalent to that offered at the University, the course(s) for which the transfer course is equivalent will be waived. Remedial and developmental courses transferred from other TBR institutions are automatically accepted.

To qualify for admission by transfer from a Tennessee Board of Regents community college or university in the State of Tennessee, a student must meet the following grade-point average requirements:

| HOURS <br> ATTEMPTED | REQUIRED GPA |
| :---: | :---: |
| $0-15$ | Not less than 1.5 cumulative average |
| $16-30$ | Not less than 1.7 cumulative average |
| $31-45$ | Not less than 1.8 cumulative average |
| $46-59$ | Not less than 1.9 cumulative average |
| Above 60 hours | Not less than 2.0 cumulative average |

To qualify for admission by transfer from an out-of-state college or university, a student must have, as a minimum, an overall 2.00 grade-point average. The 2.0 GPA also applies to in-state colleges/universities not in TBR system. Credits earned by students who are Tennessee residents attending TBR community college and universities in Tennessee will be accepted toward degree programs on the same basis as work taken on the campus of Tennessee State University.

## The Transfer Evaluation Process

The Office of the Registrar at Tennessee State University evaluates transfer credits for students who clear TSU admission criteria, and who have declared a major. Transfer evaluations will not be completed for students with an admission status of transient or special. The complete files of students that have cleared the transfer admissions process will be forwarded to the Office of the Registrar for evaluation. Each file is processed individually, reviewing institutional catalogs and conferring with the Academic Departments for specific course equivalencies.

Tennessee State University accepts transfer credit from institutions of higher learning based upon the following considerations:

1. The educational quality of the institution from which the student transfers;
2. The comparability of the nature, content, and level of credit earned to that offered by TSU and
3. The appropriateness and applicability of the credit earned to the programs offered by TSU in light of the student's educational goals.

All transfer Hours Attempted, Hours Earned, Quality Points and Grade Point averages earned at other colleges and universities are included in the TSU academic record. When posting transfer courses to the TSU record, all transfer courses are converted to TSU's grading scale and repeat policy. If the previous institution uses a different symbol such as $X$ or $Y$ or any other alpha character or symbol, but the
meaning is the same as I, F, at TSU, it will be treated the same and calculated in the GPA.

Students may earn college credit with grades of "P" for acceptable scores from non-traditional credit:

- Advance placement
- CLEP
- DSST
- Military Service

Under normal circumstances Tennessee State University does not accept credit from non-regionally accredited institutions of higher learning and students may be asked to provide information to determine the comparability of content and level of credit presented as transfer to that credit offered by TSU. Petition may be made by submitting the Application for Acceptance of Transfer Credit Form available in the Registrar's Office. Credit may be awarded only after review and approval by the appropriate academic department chair of the academic department in which the course is taught and approval of the academic dean of the college in which the course is taught. The application must be completed during the first term at Tennessee State University.

Students who feel that they are competent in certain subject areas are encouraged to earn credit through a nationally recognized credit-by-examination program or through departmental credit-by-examination programs at TSU.

NOTE: All universities and community colleges in the Tennessee Board of Regents (TBR) system share a common set minimum requirements for baccalaureate degrees or associate degrees designed for transfer.

NOTE:TSU honors the completion of DSP requirements from any TBR institution regardless of credit hours assigned individual courses or interventions used to complete the DSP requirements. Successful completion of DSP requirements from non-TBR institutions is demonstrated through COMPASS testing.

## Reverse Transfer

Tennessee Reverse Transfer is a process that allows early transfer students to combine their four-year college credits with community college credits to receive an associate degree. Students must have attended a Tennessee community college and be enrolled in a participating Tennessee four-year institution. For more information, contact the Office of Student Support Services for Adult and Distance Learners at (615) 963-7001/adultstudentsupport@tnstate.edu or the Office of Records at (615) 963-5101.

## Faculty Advising

You are encouraged to obtain faculty advising with regard to your degree plan prior to your first term at TSU and then each term thereafter. This will ensure that you do not enroll in the wrong courses or take them in the wrong order. By the end of your sophomore year, you should work with your advisor to fill out a "Program of Study Form" which details the courses you have completed and those yet to be completed for your major.

To obtain a faculty advisor, contact the department where you intend to major.

## Transfers with Associate Degrees

If a transfer student has earned an associate degree, the student must meet the following general education requirements:

1. 9 quarter or 6 semester hours of English composition (must earn grade of "C" or better)
2. 12 quarter or 9 semester hours of humanities ( to include at least 6 quarter or semester hours of literature)
3. 9 quarter or 6 semester hours of American or Tennessee History
4. 12 quarter or 8 semester hours of natural/physical sciences with labs
5. 6 quarter or 3 semester hours of mathematics
6. 9 quarter or 6 semester hours of social and behavioral sciences
7. 6 quarter or 3 semester hours of oral communication

Tennessee Board of Regents (TBR) Common Catalog Statement Regarding General Education

Effective Fall Semester 2004, all institutions in the State University and Community College System of Tennessee (the Tennessee Board of Regents System) will share a common lower-division freshman and sophomore general education core curriculum of forty-one (41) semester hours for baccalaureate degrees and the Associate of Arts and the Associate of Science degree.

The courses composing the general education curriculum are contained within the following subject categories:
Baccalaureate Degrees*

| Subject Area | Credit |
| :--- | :---: |
| Hours |  |
| Communication | $9 * *$ |
| Humanities and/or Fine Arts | 9 |

(including at least 3 hours in literature)

| Social/Behavioral Sciences | 6 |
| :--- | :---: |
| History | 6 |
| Natural Sciences | 8 |
| Mathematics | 3 |
| Total | 41 |

*Foreign language courses are an additional requirement for the Bachelor of Arts (B.A.) degree. The B.A. degree requires proficiency in a foreign language equivalent to completion of two years of college-level work.

Courses designated to fulfill general education requirements by Tennessee State University are published in the Undergraduate Catalog. A complete listing of the courses fulfilling general education requirements for all TBR institutions is available on the web site (www.tbr.state.tn.us) under Transfer and Articulation Information.
All other students seeking advanced standing will be admitted to Tennessee State University provided they meet the minimum requirement of a 2.00 grade-point average. All transfer grades will be used in computing the average required for admission. Students transferring from a junior or community college must complete an additional minimum of 60 hours credit for the bachelor's degree at TSU. Furthermore, any student dismissed from a college or university for academic reasons must be eligible to re-enter that institution prior to acceptance at TSU.

Credit earned at other colleges and universities (accredited/non-accredited) will be assigned by the Office of Admissions once the student is admitted. The University does not grant upper division credit (3000-4000 level courses) for lower division work transferred from community or junior colleges. In addition, no upper division credit will be granted for any lower division credit transferred from any other university or college; any exceptions to this particular provision must be approved by the Office of Admissions and Records and the appropriate department chair.
The Records Office will provide all transfer students an equivalency evaluation of all transfer credit during the first semester of enrollment at the University. All transfer credits from institutions not on the semester system will be converted to semester credits. Cumulative averages are computed on the basis of $A$ equals 4 quality points for each credit hour.

Specific questions regarding transfer credit should be addressed to the Records Office and the appropriate department chair.

## Transient Students

A transient student is one who is regularly enrolled in another college or university and who desires admission for a limited period, usually one semester. The transient student is required to submit a regular application for admission and to furnish an official transcript and a letter of good standing from the college or university Registrar's Office in which he/she is enrolled. The transient student who wishes to become a regular student must file an appropriate application and meet the same requirements for admission as a transfer student.
Transient students who have taken the COMPASS at other TBR institutions and who have not yet completed required courses must abide by test placement results.

## Advanced Standing

Students who are eligible may establish advanced standing through approved examination programs and educational experiences in the armed services. Students are awarded a grade of "P" for credit received. Transcripts, military documents, and original score reports must be submitted to the Office of Admissions and Records for evaluation and review. Approved programs are:

1. College Level Examination Programs (CLEP) of the College Entrance Examination Board
2. DSST Standardized Tests administered by Educational Testing Service
3. Advanced Placement Program of the College Entrance Examination Board
4. Military training courses in the Armed Services of the United States as recommended by the Guide to the Evaluation of Educational Experiences in the Armed Services published by the Commission on Educational Credit of the American Council on Education. For evaluation purposes:
a. U.S. Army Veterans should present the Army/ACE Registry transcript. (ARTS);
b. U.S. Air Force Veterans should present a Community College of the Air Force transcript.
The DD214 or other official documentation should be submitted to support request for credits via $A$ and $B$ above.

## Adult Special Student

This category is typically designed to serve the interests of adults who do not wish to pursue a degree at the present, but who wish to receive academic credit. An individual may be admitted subject to the following provisions:

1. He or she must hold a high school diploma or the equivalent and meet the requirement for admissions.
2. He or she may complete a maximum of 36 semester hours credit at TSU in this category. After receiving 36 hours, the applicant, to continue enrolling at TSU, must apply for regular classification and must meet transfer admission requirements.
3. He or she must take the COMPASS sub-test in English and/or Math before enrolling in these collegelevel courses unless the applicant has been placed by a valid ACT/SAT. If the student's ACT places him/her in college preparatory courses rather than in college-level courses, the student may take the COMPASS to challenge such placement for a fee of \$20.

## Special Student (Audit)

Any person who is 18 years of age or older and wishes to take a course but receive no credit (audit) may do so by applying atthe Admissions Office. Regular registration fees will be charged for auditing courses. Registration is on a space available basis. Students cannot audit developmental courses.

## 60-Year-Old/Disabled (Audit) Student

Applicants who are 60 years old or older or permanently and totally disabled (T.C.A., Section 49-3251), and domiciled in Tennessee are required to pay the $\$ 15$ application fee but are not required to pay registration fees if they audit courses. Proof of age or disability is required (proof of disability is required annually). Registration is on a space-available basis. Regular registration fees will be charged for credit courses.

## 65-Year-Old/Disabled Credit Student

Persons 65 years of age or older or permanently and totally disabled persons (T.C.A., Section 49-3251) who are domiciled in Tennessee may register for classes on a space available basis for credit, paying a minimum registration fee. The cost is one-half the semester hour rate up to a maximum of $\$ 75$. An application fee of $\$ 15$ is required. The applicant must be a high school graduate or the equivalent, and the applicant must submit proof of age or disability (proof of disability is required annually).

## International Students

International students with superior scholastic records are considered for admission as freshmen and as transfer students. An applicant whose native language is not English is required to submit a test score of 500 as the minimum acceptance level of performance on the Test of English as a Foreign Language, (TOEFL) or $80 \%$ on The Michigan Test. Students who have ACT/SAT equivalent score will be placed according to these scores. Students who have not had college-level English and/or Math must undergo COMPASS testing. Applicant must:

1. Submit requested information at least 60 days prior to the beginning of the semester of enrollment.
2. Submit official TOEFL (Test of English as a foreign language) scores.
3. Submit a Notarized Affidavit of support and bank statement. These documents must not be older than six (6) months prior to desired semester of enrollment.
4. Submit official transcripts from each educational institution and examination certificate (0 levels).
5. Proof of a current physical examination.
6. Submit official transcripts from colleges/universities attended in the United States.
7. Copies of Visa and Alien Registration card.
8. Take the ACT/SAT test.

If complete documents are not on file by this deadline, the application will be considered for the next scheduled registration period. The application must be accompanied by a nonrefundable fee of $\$ 25$.

## New Student Orientation and First Year Students

All new students are required to participate in new student orientation programs and activities held prior to enrollment in the university. New student orientation sessions are offered to first-time students entering in the fall and spring semesters. New student orientation programs are designed to facilitate the transition of new students into the university and to acclimate new students to the campus community by providing opportunities that promote student learning and development. New student orientation programs prepare new students for university life by offering sessions on financial aid, campus technology, academic advisement, and registration.

Other new student orientation programs and activities include New Student Convocation, which is a ceremony that celebrates the entry of new students into the university, and Welcome Week, which provides additional opportunities for students to obtain information about academic and student support services, establish relationships with faculty, staff, and students, and become familiar with the campus. First-year student programs support the progression and retention of
new students through various initiatives and programs that address both academic and social adjustment issues.

## Educational Consortium TSU/MTSU

Tennessee State University and Middle Tennessee State University have joined in an educational consortium to provide advantages available to undergraduate students enrolled at each institution. The procedures for TSU students seeking to register for MTSU courses are as follows:

1. Obtain advisement and approval from academic department.
2. Obtain an "Agreement for Admission and Registration" form from TSU Records Office.
3. Complete top of form.
4. Have form approved and signed by the Records Office.
5. Register at TSU for TSU courses, pay fees.
6. Present form to Admissions and Records personnel at MTSU.
7. Register for courses at MTSU and present TSU receipt, pay additional fees to MTSU, if any.

## Cross -Town Enrollment in the Air Force Reserve Officers Training Corps

Educational institutions within Nashville and the surrounding area having a Cross-town Agreement with Tennessee State University may allow their students to enroll in the university's
AFROTC Program. These students are eligible to receive all benefits, privileges, and scholarships as fully enrolled TSU students. At present, Vanderbilt University, Middle Tennessee State University, Fisk University, David Lipscomb College, Western Kentucky, Trevecca Nazarene College, Belmont College, Volunteer State Community College, and Meharry Medical College, Aquinas Junior College have such agreements with the University.

## Immunization Requirements

The State of Tennessee as of July 1, 1998 requires students entering and returning to colleges and universities provide proof of two doses of immunization with Measles, Mumps, and Rubella (MMR) vaccines administered on or after the first year of birth. Students will not be allowed to register for courses until immunization forms are filed in the TSU Student Health Services department. If additional information is desired contact the Queen Washington Health Center at (615) 9635291. The General Assembly of the State of Tennessee mandates that each public or private postsecondary institution in the state provide information concerning hepatitis $B$ infection to all students entering the institution for the first time. Those students who will be living in campus housing must also be informed about the risk of meningococcal meningitis infection. Tennessee law requires that students complete and sign a waiver form provided by the institution of Disease Control and the American College Health Association. The law does not require that students receive vaccination for enrollment, but, however requires students to provide a signed copy of the waiver form to TSU Student Health Services, 3500 John A. Merritt Blvd., P.O. Box 9528, Nashville, TN 372091561 or fax to (615) 963-5084.

## Residency Classification

The Admissions Office is charged with the determination of a student's residency status for fee-paying purposes and as the basis for some University admission requirements. Classification is determined by information submitted on the admission application and/or application for re-classification. Notification in writing is made soon after the student applies for re-classification. The deadline dates are:

Summer Session
Fall Semester
Spring Semester

April 1
July 1
November 1

Students seeking a change in residency based on the "Work Rule" must:

1. Complete the Change in Residency Application.
2. Submit required documentation as outlined in the Residency Application.
3. Submit most recent copy or copies of check stubs.
4. Have a letter of verification relative to work status (full-time/part-time) forwarded on official letterhead by employer.
Students seeking a change in permanent residency must:
5. Complete the Change in Residency Application.
6. Submit required documentation as outlined in the Residency Application.
7. Submit copy of income taxes and proof of full-time employment in TN for at least 1 year prior to enrollment
All decisions are based on regulations established by the Tennessee State Board of Regents, with the intent that all Tennessee public institutions of higher education apply uniform classification rules. Should a student be denied instate classification, the student has the right of appeal. The appeal steps are:
8. Director of Admissions
9. Vice President of Enrollment Management \& Student Support Services
10. President of the University
11. Tennessee State Board of Regents

## Information for Veterans, Dependent Children and War Orphans

Persons eligible to receive Veterans Educational benefits may obtain information and applications from the Records Office.
c. repeating of courses
d. removal of deficiency grades
e. any course in which the student is currently enrolled
f. any course which the student attempted or was enrolled in for four or more weeks prior to withdrawal
8. The examination must be completed and the recorded results must be received by the Office of Admissions and Records according to the following schedule:

- Regular Semester (prior to the end of the 9th week of classes).
- Summer Sessions I \& II (prior to the end of the 3rd week of classes).
- 

To register for a CLEP or DSST exam go to www.tnstate.edu/testing.

## PRIOR LEARNING ASSESSMENT

Tennessee State University (TSU) recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their life, work and learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). PLA represents nationally recognized methods of consideration that save students from having to take courses in subjects they already understand. TSU has three major PLA categories:
a. Credit by Examination - includes Advanced Placement (AP) Program (See page 26 of
the Undergraduate Catalog for details), College Level Exam Program (CLEP), Local Exams (Academic Department Exams), and DANTES Subject Standardized Tests (DSST), (See page 26 of the Undergraduate Catalog for details);
b. Advanced Standing - American Council of Education (ACE) Military Credit;

## c. Portfolio-Based Assessment through "LearningCounts"/Council for Adult and Experiential Learning (CAEL).

PLA credits are applied towards the student's degree program as applicable. According to Tennessee Board of Regents (TBR) Guideline A-030 I:H-4, "credit based on PLA at another TBR institution will be accepted in transfer and applied toward the student's degree in the same way that any other type of transfer credit is accepted." At Tennessee State University, the maximum limit of 60 semester credit hours (SCH) may be gained through a combination of credit by examination CLEP, DSST, and Local Exams. For ACE Military Credit and Portfolio-Based Assessment, the maximum number of semester credit hours accepted will be determined by the academic department. In all cases a student must earn $25 \%$ of hours required for a degree in instruction delivered by the institution awarding the credential. PLA credit will not count toward this $25 \%$ minimum. No other limitations are to be placed on student eligibility for PLA credit, such as minimum age or work experience.

## Credit by Examination

Students who have mastered knowledge and skills covered in a college level course may earn degree credit for that course through taking either standard or local examinations (Departmental Exams). Local examinations are generated by faculty in the department which offers the course.

## CLEP and DSST

Standard examinations offered are CLEP (College Level Examination Program) and DANTES (Defense Activities for Non-Traditional Education Support)/DANTES Subject Standardized Test (DSST). Local examinations are not generated where a department has adopted use of either CLEP or DANTES. A listing of adopted standard examinations and the equivalent TSU courses follows this narrative. Standard examinations are graded by the agency which supplies the test. Local examinations are graded by TSU faculty.

A student who wishes to earn credit by examination begins the process through discussion with his/her department chair. The department chair will provide written instructions on the credit by examination process for both standard and locally generated examinations. The Testing Center (615-963-7111) may be contacted for additional information.

Academic credit attained through CLEP Subject Area Examinations and DANTES (DSST) will be given to TSU students provided:

1. Scores are equal to or greater than the required minimum score shown in the accompanying Credit by Standard Examination table.
2. CLEP and DANTES credit do not duplicate any college credit counted for admission.
3. Credit earned through CLEP and DANTES will be entered on the student's permanent record but will not be computed in the grade point average.
4. A maximum of 33 semester hours may be gained through a combination of College Level Examinations, DANTES and examinations for credit.
5. These examinations may not be taken to repeat course work or to remove a grade of "F" or "l".
6. Certain CLEP exams earn credit for two TSU courses; students who have already earned credit for one of the two courses with a grade of " $C$ " or above are eligible to take the CLEP exam to earn credit for the second course.
7. Examinations for credit may not be used for:
a. research or independent study courses,
b. any course work from which the student has been exempted,
c. repeating of courses,
d. removal of deficiency grades,
e. any course in which the student is currently enrolled,
f. any course which the student attempted or was enrolled in for four or more weeks prior to withdrawal.
8. The examination must be completed and the recorded results must be received by the Office of Admissions and Records according to the following schedule:
a. Regular Semester (prior to the end of the 9th week of classes),
b. Summer Sessions I \& II (prior to the end of the 3rd week of classes).

To register for a CLEP or DANTES (DSST) exam, go to www.tnstate.edu/testing.

## Local Examinations

As stated above, local examinations are generated by faculty in the department which offers the course. These examinations are graded by TSU faculty. Each department determines which of its courses is appropriate for credit by examination. The department also determines if it will accept credit by examination for its majors. Because of content, performance or other requirements, not all courses readily lend themselves to the credit by examination process. A student who wishes to earn credit by examination begins the process through discussion with his/her department chair. The department chair will provide written instructions on the credit by examination process for both standard and locally generated examinations.

## Advanced Standing

Students who are eligible may earn college credit through approved recommendation services/examinations and educational experiences in the armed services. A student is awarded a grade of " $P$ " for credit received. Transcripts, military documents, and original score reports must be submitted to the Office of Admissions and Records for evaluation and review. Approved programs are:

1. College Level Examination Programs (CLEP) of the College Entrance Examination Board,
2. DANTES (DSST) Standardized Tests administered by Educational Testing Service,
3. Advanced Placement Program of the College Entrance Examination Board,
4. Military training courses in the Armed Services of the United States as recommended by the Guide to the Evaluation of Educational Experiences in the Armed Services published by the Commission on Educational Credit of the American Council on Education (ACE). For evaluation purposes:
a. U.S. Army Veterans should present the Army/ACE Registry transcript. (ARTS);
b. U.S. Air Force Veterans should present a Community College of the Air Force transcript.

The DD214 or other official documentation should be submitted to support request for credits via a and babove.

For more information concerning these programs, a student may contact the Prior Learning Assessment Advisor in the academic department, or the Prior Learning contact in the Office of Student Support Services for Adult and Distance Learners at (615) 963-7001 or email adultstudentsupport@tnstate.edu. Students with military experience should contact the Veterans Certifying Official in the Office of Admissions and Records.

## Portfolio-Based Assessment

Students who are seeking degrees may be granted credit in their major for college level knowledge and understanding gained from work experience, life experience, or non-college instruction. This method of PLA requires a student to enroll in six week course yielding three (3) semester credit hours which provides instruction as to how to build a portfolio documenting learning from life and work experience. Currently, Tennessee State University uses "LearningCounts"/Council for Adult and Experiential Learning (CAEL) to assist students with the preparation of a portfolio. Completed portfolios are assessed by CAEL expert faculty in a given discipline to determine if college level credit will be granted. A student is awarded a grade of Pass/Fail which will be reflected on the TSU official transcript as credit for a specified course. For more information on portfolio-based assessment, contact the Coordinator of Student Support Services for Adult and Distance Learners, at (615) 963-7001 or adultstudentsupport@tnstate.edu.

## Correspondence Courses

A student may receive credit for correspondence work earned from other institutions. The student must receive written approval from the Office of Admissions and Records, Department Chair and College/School Dean in order to apply these credits to his/her degree program of study.

| Minimum Scores Required on CLEP and DANTES (DSST) Examinations |  |  |  |
| :---: | :---: | :---: | :---: |
| University Course Title/Number | Credit Hours | CLEP Subject Exam Title | Minimum Score |
| Biology 1110, 1120 and Labs | 8 hrs . | Biology | 50 |
| Biology 1010, 1020 and Labs | 8 hrs . | Natural Sciences | 50 |
| Business Law 3230 | 3 hrs . | Business Law | 51 |
| Chemistry 1110, 1120, and Labs | 8 hrs . | Chemistry | 50 |
| Economics 2010 | 3 hrs . | Macroeconomics, Prin. of | 50 |
| Economics 2020 | 3 hrs . | Microeconomics, Prin. of | 50 |
| English 1010, 1020 | 6 hrs . | College Composition | 50 |
| English 2210, 2230 | 6 hrs . | English Literature | 50 |
| English 2110, 2120 | 6 hrs . | American Literature | 50 |
| French 1010, 1020 | 6 hrs . | French Language | 50 |
| French 2010, 2020 | 6 hrs . | French Language | 62 |
| History 1000 | 3 hrs . | Global Culture in History | 50 |
| History 2010 | 3 hrs . | History of the United States I: Early Colonization to 1877 | 50 |
| History 2020 | 3 hrs . | History of the United States II: 1865 to the Present | 50 |
| History 2060 | 3 hrs . | World History I | 50 |
| History 2070 | 3 hrs . | World History II | 50 |
| History 2700 | 3 hrs . | African American Experience | 50 |
| Management 3010 | 3 hrs . | Management, Principles of | 50 |
| Marketing 3010 | 3 hrs . | Marketing, Principles of | 50 |
| Mathematics 1110 | 3 hrs . | College Algebra | 55 |
| Mathematics 1910, 1920 | 8 hrs . | Calculus | 50 |
| Political Science 2010 | 3 hrs . | American Government | 50 |
| Psychology 2010 | 3 hrs . | Introductory Psychology | 55 |
| Psychology 3730 | 3 hrs . | Educational Psychology | 50 |
| Spanish 1010, 1020 | 6 hrs . | Spanish Language | 50 |
| Spanish 2010, 2020 | 6 hrs . | Spanish Language | 66 |
| Sociology 2010 | 3 hrs . | Introductory Sociology | 50 |
|  |  |  |  |
|  |  |  |  |
| University Course Title/Number | Credit Hours | DANTES Exam Title | Minimum Score |
| Accounting 2010 | 3 hrs . | Principles of Financial Accounting | 50 |
| Economics 3200 | 3 hrs . | Money and Banking | 50 |
| Finance 3300 | 3 hrs . | Principles of Finance | 50 |
| Management 1010 | 3 hrs . | Introduction to Business | 50 |
| Management 3010 | 3 hrs . | Organizational Behavior | 50 |

## Academic Fresh Start

Academic Fresh Start is available to re-admitted student who were formally enrolled in the institution as well transfer students who meet institutional requirements for admission and who have been separated from all institutions of higher education for a minimum of four (4) years. This program allows eligible students whose academic performance was unsatisfactory during earlier college attendance to disregard grades earned. A student who has not attended any institution of higher education for the past four years is eligible to participate in Academic Fresh Start. Courses taken and previously failed may be excluded from the calculation of the Grade Point Average (GPA). Courses with a D grade may also be excluded from the calculation when a grade of C or better is required in the student's current major. GPA and credit hours will reflect courses for which passing grades were earned and retained. The student's permanent record will remain a record of all work. It is the responsibility of the student to adhere to the process and to submit the required Fresh Start application. A student may be granted Fresh Start only once.

To qualify for Academic Fresh Start, the applicant must:

1. Have been separated from all collegiate institutions for at least four (4) years at the time of admission or readmission to the University.
2. File a formal application with the Tennessee State University Office of the Registrar (this application may be submitted any time after your readmission or admission as a degree seeking student).
3. Submit official college transcripts from institutions attended other than Tennessee State University.
4. Not hold any college degree.

## Academic Affairs Support Activities Child Care Centers

The Department of Family and Consumer Sciences operates two centers: the Early Learning Center on the Main Campus and the Child Care Center on the Avon Williams Campus. The Child Care Center provides convenient, dependable and professional child care for students, staff and faculty while attending classes on the Avon Williams (downtown) Campus and the main campus, when feasible. The program currently operates during the evening hours, Monday through Thursday. Children three years of age and older are eligible for enrollment. There is a non-refundable registration fee of $\$ 5$ for first-time enrollment. The fee is per hour, per child, with a \$. 50 reduction per hour for the second and third child. Parents are billed monthly.
The Early Learning Center, located in the Frederick S. Humphries Consumer Sciences and Nursing Education Complex, is based upon a strong commitment to quality education for children and for the University students it serves. The philosophy of the program is derived from a combination of the major theories of child development: Jean Piaget for cognitive development; Erik Erikson and Burton White for social-emotional development. The program is based on the assumption that preparation for intelligent and independent thought begins in the preschool years, and practice in productive thinking is necessary for that to occur.
The program is also based upon the assumption that children are unique individuals developing in stages at different rates. The Center on the main campus is open Monday-Friday, during the school sessions/semesters. Four methods of fee payments are available. For information about the programs, call 963-5601 (both centers) Department of Family and Consumer Sciences or 963-7286 (Avon Williams Campus Child Care Center) or 963-5591 (Early Learning Center Main Campus).

# Academic Information 

## Academic Policies and Requirements Registration Procedures

Any person who anticipates registering as a Tennessee State University student should be sure that the University requirements for admission have been met. Official enrollment is achieved by properly registering in each course, having a photograph made for an identification card, and paying of all fees.

Normally, all students register for courses during the days on which registration is scheduled. Detailed instructions are made available by the Records Office as to time, places, and procedure for registration.
A late registration period is provided for those who are unable to register during the regular registration days. However, students who register late are required to pay a late registration fee and often find it difficult to secure a satisfactory schedule of classes. The late registration fee is $\$ 100.00$ If a student does register late for (or add) a course, he will be responsible for all material covered from the first class meeting and must, at the discretion of the instructor, be responsible for any make-up work or tests.
Detailed procedures for registration are given each semester as a part of the schedule of classes.
The following must be observed prior to registration to avoid delay:

1. Freshmen and transfers must be accepted for admission prior to registration.
2. All students are expected to register at their scheduled time for registration. No one will be allowed to register earlier than the scheduled time. Each student must observe registration procedures as specified at that time. A student is not officially enrolled until all of the requirements of registration, including the payment of fees, are completed.
3. Former students must submit a re-admission application and settle all prior accounts in the Business Office before registering.
The following must be observed during the registration periods:
4. All freshmen must complete the testing program if appropriate.
5. All students must have a conference with a faculty advisor to arrange an approved schedule of classes.
6. All students must pay fees in full on the day they register. Students who do not pay will be purged.
7. All freshmen and first-time transfer students must have I.D. pictures made and automobiles registered.

## Course Numbering System

Degree level courses are numbered from 1000 to 8990. Undergraduate courses are numbered from 1000 to 4999; courses which are primarily masters' level are 5000 and 6000; doctoral level courses are 7000 and 8000

## Information for Veterans, Dependent Children and War Orphans

Persons eligible to receive Veterans Educational benefits may obtain information and applications from the Records Office.

## Academic Common Market

The Academic Common Market is an interstate agreement among southern states for sharing academic in common programs. Participating states are able to make arrangements for their residents who qualify for admission to enroll in specific programs in other states on an in-state tuition basis. http://www.sreb.org/page/1304/academic common market.ht ml

To participate in the Academic Common market program, students must:

1. Be accepted for admission to the University and academic programs for which your state has obtained access for its residents through the Academic Common Market.
2. Obtain certification of residency from the Common Market Coordinator in your home state. Contact the State Coordinator in your state for Certification information.

| Categories | Quality Hours <br> Attempted | Required <br> Cumulative GPA |
| :---: | :---: | :---: |
| One | $0-15$ hours attempted | Not less than 1.5 <br> cumulative GPA |
| Two | $16-30$ hours attempted | Not less than 1.7 <br> cumulative GPA |
| Three | $31-45$ hours attempted | Not less than 1.8 <br> cumulative GPA |
| Four | $46-59$ hours attempted | Not less than 1.9 <br> cumulative GPA |
| Five | 60 and above hours <br> attempted | Not less than 2.0 <br> cumulative GPA |

At the end of the next term of enrollment, a student on academic probation who has failed to attain either the above cumulative standard or a 2.0 GPA for that term will be suspended. The first suspension may be appealed. If successfully appealed, the student must either earn a semester GPA of at least 2.00 or achieve the cumulative GPA required for the number of credit hours attempted as outlined in the preceding chart. Students failing to meet one of these standards must sit out for one semester, excluding summer sessions. Students must apply for re-admission for the semester in which they plan to return to the University.
A student who believes that extenuating circumstances contributed to his/her suspension may appeal the case to the University's Review Committee on Suspension and Readmission. To appeal, the student must explain those circumstances on a form submitted to the Chairperson of the Review Committee on Suspension and Readmission immediately after receiving notification of suspension.

## Auditing a Course

Students who plan to audit a course must report to the Records Office located in the Floyd-Payne Campus Center, Room 305 during registration in order for the audit to appear on his/or her schedule. The regular registration procedure is followed. Students are not held to attendance or evaluation requirements for the course and no credits are earned. Audits may not be used to meet degree requirements. The audit fee is the same as the credit fee.

## Normal and Minimum Class Loads

The normal class load for a full-time undergraduate student is 15 to 18 credit hours per semester, and the minimum class load is 12 credit hours per semester. One semester hour credit of required physical education or one semester hour credit of aerospace studies at the 100 or 200 level may be added to the normal load.
3. Make sure that the program of which you intend to enroll is offered at TSU.
4. Submit certification information and/or form to the Office of Admissions and Records prior to the last day of registration of the semester in which you intend to enroll.
5. Students who take advantage of the Academic Common Market Program can not pursue a double major unless both majors are listed on an approved Academic Common Market Certification by the students' state of residency.

Students who are eligible for this program must pursue the appropriate major as designated on the Academic Common Market Certification that is submitted by the Department of Higher Education/Postsecondary Education of their state of residency. No other majors can be taken simultaneously with the selected major per academic common market. Students who violate this policy will be subject to payment of fees required of non-resident students.

## Retention Standards and Academic Probation:

 https://elearn.tnstate.edu/d2l//p/ouHome/home.d2l?ou=6710The minimum cumulative grade point average required by the University for awarding the baccalaureate or associate degree is 2.00 for all degree level work taken by the student as part of an approved program of study. The GPA is computed by dividing the total number of hours attempted into the total number of quality points earned (see Grading System) except for credit hours in courses for which the student received a of "W" or "I", (see Adjusting Class Loads). Any enrolled student who meets the minimum academic requirements is in good academic standing at the University.
Probationary status will be incurred by the student who fails to meet the standards listed below in any term.

## Probationary Student Class Loads

A student who incurs scholastic probation in any semester (see scholarship standards) will be allowed to carry a maximum of 13 semester hours. Course credits beyond the maximum load of 13 hrs . will be dropped from the student's schedule.

## Maximum Class Loads

Freshmen may not register for hours in excess of their normal course load. Sophomores, juniors, and seniors whose cumulative grade-point averages are 3.00 or above may register for as many as three credit hours in excess of the normal course load-up to a total of 21 credit hours.
Graduating seniors who have applied for graduation and whose grade-point averages are 2.00 or above may register for as many as three credit hours in excess of their full curricular load up to a total of 21 credit hours. In all cases, the student must apply to his school dean, who may approve requests for such increases in class loads. The school dean must notify the Records Office in writing of each case approved.
Twelve semester hours constitute full time status for undergraduate students for the Fall and Spring semesters. Course loads of 18 hours in the Fall and Spring and 15 hours in the Summer are permitted without special approval for undergraduate students in good academic standing-not on probation.
A three-hour overload may be approved during the Fall and Spring for sophomores, juniors and seniors with cumulative grade-point averages of 3.00 and above. A three hour overload is permitted for graduating seniors (those who are certified by their advisors as prospective graduates for the current semester not just senior classification). The maximum course load for any undergraduate student during the Fall and Spring is 21 hours, including courses being taken at TSU and any other institution.

All overloads must be approved prior to the student enrolling in the course. The maximum course load for undergraduate students for Summer is15 hours.

## Classification of Students

All undergraduates must be classified in one of the following categories:

1. Freshmen: Those who have completed less than 30 semester hours
2. Sophomores: Those who have completed between 30 and 59 semester hours
3. Juniors: Those who have completed between 60 and 89 semester hours
4. Seniors: Those who have completed 90 semester hours or more.
5. Specials: (A) Those who meet entrance requirements and who wish to pursue particular studies but not to qualify for a bachelor's degree. Such students may be admitted with the permission of the Dean of Admissions and Records. (B) Those who are 21 years of age and who have not completed four years of high school work may enroll in such courses as they are prepared to take up to a maximum of 36 semester hours.

## English Proficiency Requirements

All degree-seeking students must demonstrate English Proficiency by successfully completing (i.e., with a grade of A, B, or C) English 1010 and 1020 (Freshman English). Students who earn a "D" grade in English 1010 or 1020 are required to repeat Freshman English and earn a " $C$ " or better.

Students for whom transfer equivalence of $\mathrm{A}, \mathrm{B}$, or C in English 1010 and 1020 has been accepted by the University will be determined to have satisfied the English Proficiency requirement. A transfer student with a grade of "D" in English
1010 or 1020 must repeat Freshman English and earn the grade of "C" or better. Any transfer student for whom there is a question of English Proficiency will be required to complete a writing sample which is scored holistically. Transfer students who have not met a comparable proficiency requirement elsewhere must remove the deficiency during the first semester of residence at Tennessee State University.

## Examinations

Late Final Examinations: Students are expected to take all examinations according to the schedule except in very unusual circumstances, such as incapacitating ill health. If a student does absent himself from final examination without having first secured the written permission of his school dean, he must confer as soon thereafter as possible with his school dean concerning the reasons for having missed the examination(s). If after conferring with the teacher of the course, the Dean is satisfied that unusual, justifying circumstances prevailed, and the student is given permission to take a late examination.

## Class Attendance

Students are expected to attend regularly all courses in which they are enrolled for credit and to complete all required work in such courses. Student participation in courses is mandatory, and monitoring of attendance and participation is ongoing by faculty teaching the course. Irregular attendance or any substantial number of unexcused absences may weigh adversely in the consideration of grades or any petition for a special academic privilege such as make-up assignments and/or examinations. To be allowed to make up work, students must present appropriate documentation to the classroom instructor. Students who have excused absences must arrange with the instructor to make up class and laboratory work immediately. Information on attendance and participation becomes a part of the student's file. Attendance is also considered in the awarding of, and continued eligibility for, student financial Aid.
Regular Monday, Wednesday, and Friday classes during the academic year are scheduled for 55 minutes with a 15 minute break between classes. Regular Tuesday and Thursday, classes are scheduled for 85 minute periods and are separated by 15 minute intervals. Classes scheduled for one day per work are scheduled for three hours. Some classes meet for periods of time that vary from these patterns. These are designated in the published semester schedules. Punctuality in attending classes is expected of all students. Registration and payment of fees are required before classes are attended.
Students must not attend classes unless they have officially registered and paid for them. Grades will not be granted to students after the fact-retroactive registration and payment will not be accepted.

## Policy on Excessive Absences

Students are expected to attend classes regularly and on time. Instructors will keep an accurate record of class attendance. "Excessive" absence is defined as no less than one more than the number of times a class meets per week. It is the student's responsibility to withdraw from a course in which excessive absences have been incurred. A student with excessive absences may only be readmitted to class by the instructor. A student, who has not been readmitted to a class by the official withdrawal date, may not be readmitted to that class and will receive a mandatory grade of $F$.

## Academic and Classroom Conduct

The instructor has the primary responsibility for control over classroom behavior and maintenance of academic integrity, and can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct in violation of the general rules and regulations of the institution. Extended or permanent exclusion from the classroom or further disciplinary action can be effected only through appropriate procedures of the institution.
Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to the other possible disciplinary sanctions which may be imposed through the regular institutional procedures as a result of academic misconduct, the instructor has the authority to assign an " $F$ " or a zero for the exercise or examination, or to assign an " $F$ " in the course.
If the student believes that he or she has been erroneously accused of academic misconduct, and if his or her final grade has been lowered as a result, the student may appeal the case through the appropriate institutional procedures (Grade Appeal).

## Grade Appeal

The University recognizes the right of a student to appeal a grade which she/he believes is incorrect and does not reflect the student's class performance. Issues related to harassment (sexual, racial, or other) should be referred to the Affirmative Action Officer.

Students who believe an incorrect grade was awarded should seek a resolution with the instructor as soon as possible. If the student is not satisfied after attempting to reconcile the matter with the instructor, the student may appeal to the department chair of the department. This appeal must be in writing, accompanied by any relevant supporting documents, and must be initiated within 30 calendar days of the beginning of the semester immediately following the semester in which the grade was awarded (excluding summer school).
The department chair shall provide a copy of the student's letter to the instructor and request a written response from the instructor. The instructor will provide the department chair with a written response within 10 working days. (Exceptions will apply when the instructor is not teaching, as in summer sessions, or when the instructor is on leave.) The department chair will provide the instructors response regarding the appeal to the student. If not satisfied with the instructor's decision, the student may file a written appeal to the department chair within 10 days of receipt from instructor. The department chair must render a written decision with ten days of receipt of the appeal. In instances where an instructor indicates to a student that a grade adjustment is warranted, and fails to make the adjustment within ten working days, the student should inform the instructor's department chair.
If the student is not satisfied with the decision of the department chair a further written appeal may be made to the Dean of the College/School. Copies of the written decision from the faculty member and the department chair must be attached to this appeal. This appeal must be made within ten calendar days of the decision of the department chair. After reviewing the appeal record, the Dean must render a written decision within ten days of receipt of the appeal. If the student does not agree with the decision of the Dean, the next level of appeal is the Office of the Provost. The student filing the appeal must submit the appeal in writing along with copies of all decisions of the faculty, department chair and Dean in order for the Office of the Provost to analyze the appeal.

If the instructor happens to be the department chair or the dean, the appeal will be submitted in writing to the next higher academic officer (that is, to the dean if the department chair is the instructor or to the Provost if the dean is the instructor). In such cases, the decision of the Provost is final. The student must submit written denials from all levels before appealing to Office of Academic Affairs.

Grades, transcript information, drop/adds, withdrawals and other data perceived by the student to be in error must be protested by the student within thirty days. Appeals made after this time will not be reviewed. In no case will an appeal be heard after one year.

## Regulations Regarding Grades of "I"

Removal of " l " grades: "Incomplete" is a temporary grade which must be removed from the undergraduate student's permanent record within one semester from the end of the term in which the "I" grade was awarded. If all requirements of a course in which the "l" was awarded are not met within one semester, the grade of " $\mid$ " will automatically convert to a grade of "F. Inasmuch as the awarding of an Incomplete is the decision of the instructor, it is the instructor's responsibility to inform the student an Incomplete was awarded and make him/her aware ", of what assignments must be completed to remove the "I." A written agreement should be developed between the instructor and student to specify what requirements remain for the student to complete course and qualify to change the I to an academic grade. Students are NOT to be instructed to re-enroll in any course or laboratory to remove an Incomplete. If the extent of the work to be done is
such that the student needs to attend class, the student should be awarded an appropriate grade and it becomes the student's decision, or requirement to re-enroll in the course."

The "I" grade may be removed by following the steps below:

1. Contact the instructor who awarded the Incomplete, and complete all assignments required to remove the "l" grade.
2. The Instructor will download the form from www.tnstate.edu/records.
3. The replacement grade must be filed in the Records Office in person or by e-mail, by the Instructor of the course after it has been properly completed (name of student, grade awarded, credit hours which the course carries, title of the course, department chair's signature, and the instructor's signature).

## Withdrawing from a Course

Students wishing to withdraw from a course must do so via "MyTSU". Athletes wishing to withdraw from a course must secure approval and signature from the Assistant Athletic Director for Academic Services and submit the proper form to the Records Office. A student may receive a grade of "W" if he withdraws according to the time period listed the Class Schedule and/or the Academic Calendar which is listed on the web at www.tnstate.edu. If a student never attends a class officially registered for or stops attending class without officially withdrawing, that student will be assigned a final grade of "F."

## Withdrawing from the University

A student may not withdraw from all courses via "MyTSU". Withdrawal from all courses during the semester is considered a "withdrawal from University" and must be handled through set university procedures. The first step in withdrawing during the regularly observed university schedule requires meeting with a counselor in the University Counseling Center. Students must also acquire the proper form from the Counseling Center, obtain the appropriate signatures, and submit the form to the Records Office.

After published withdrawal deadlines have passed, the student must be assigned a grade of "F". Requests for Administrative withdrawal from the University after that time must be documented by the student and approved by the Vice President for Student and Academic Affairs. Health problems or other extenuating circumstances beyond the student's control may be reasons for granting withdrawal from the University. Supporting documentation must be provided.

## Repeating of Courses

Students may repeat courses in which final grades are C or lower subject to the following:

1. For the purpose of increasing mastery in a course where such is necessary for successful performance in a subsequent course, or
2. For the purpose of increasing the quality point average,
3. No course may be repeated more than twice except upon the advice of the major advisor and with the approval of the department chair and dean. If the student repeats a course more than twice, the grade in the third and subsequent attempts is used in calculating the quality point average.
4. The last grade earned will stand even if the last grade received is an " $F$ ". All repeated courses remain on the student's transcript with repeat notations.
5. Veterans receiving educational assistance benefits may not repeat courses previously passed and receive financial assistance for such.

## Correspondence Courses

A student may receive credit for correspondence work earned from other institutions. The student must receive written approval from the Office of Admissions and Records, Department Chair and College/School Dean in order to apply these credits to his/her degree program of studies.

## Courses Taken at Other Institutions

Students who wish to take courses at other institutions while attending Tennessee State University must complete a Permission To Enroll at Another Institution Form. The courses must be approved and the form signed, in advance, by the Chairperson of the department in which the student expects a degree. The form must be submitted to the Office of Admissions and Records and validated by the Registrar. This also applies to registration in the summer at another institution.

Students are to adhere to the following instructions and regulations:

## Instructions

1. The student must submit the course description for which enrollment is desired.
2. The student must receive the approval, on this form, of the appropriate Department Chair.
3. The student must sign the form.
4. The student must return the form to Records for verification of eligibility and signature of the Registrar.
5. Approval is only required when course equivalency information is not available on the web site.

## Regulations

1. The student cannot be on academic probation while attending another institution.
2. The student must earn the last 30 hours needed for graduation at TSU. Six of these hours may be taken at another institution if prior permission is provided by the Department Chair.
3. All courses/grades received will be posted on the student's records at TSU.

The grade and quality points for those courses will be included in the calculation of the grade point average at Tennessee State. It is the student's responsibility to request that a transcript be sent to the Office of Admissions and Records to the attention of the Registrar.
Course work in which a grade of "F" has been earned at Tennessee State University may not be repeated at non TBR institutions for the purpose of replacing the Tennessee State University grade. Approval will not be provided for repeating courses with grade of " $C$ " or better at another institution outside the TBR system.

## Grading System

The following is a description of the criteria used in assigning letter grades.

| Grades | Quality Points/ <br> Semester Hour | Description |
| :---: | :---: | :---: |
| A | 4.0 | Excellent, work of exceptional <br> quality which indicates the <br> highest level of attainment in <br> a course. |
| B | 3.0 | Good, work above average <br> which indicates a high level of <br> achievement. <br> Work of average quality <br> representing substantial <br> fulfillment of the minimum <br> essentials of a course. |
| C | 2.0 | Poor, representing passing |


| EP | 0.0 |
| :---: | :---: |
| EF | 0.0 |
| F | 0.0 |
| I | 0.0 |
|  |  |
| S |  |
| U | 0.0 |
| W | 0.0 |
| AU | 0.0 |

## Substitution of Courses

Requests to substitute courses required in the curriculum are presented to the student's advisor. The request must meet the following conditions:

1. All courses being considered for substitution must meet the University's requirements for transfer credit.
2. The student must have a minimum of C in the course to be used for substitution if the course is a requirement for the major.
3. The following credit may not be used for course substitution:
a. CLEP
b. Correspondence Course
4. Student may not seek substitution for a course he/she has failed. dean of the school in which the student is enrolled, must approve the request. In cases of University requirements, the Registrar has final approval. In cases of program requirement only, the academic dean has final approval.
5. The faculty advisor, department chair of the discipline for the substitution course, and the
6. Student has taken an equivalent course at TSU or another recognized institution but this course has not been equated on the TSU transfer evaluation.
7. Student has transferred in credit by TSU procedures and has met the course content requirement but has a credit deficiency.
8. Since some University degree requirements may be the same as some specialized program requirements, the policies and procedures recommended would apply to both situations.
9. Substitution is not to be confused with waiver. Substitution is an option to meeting program requirements, while waiver implies exemption.
10. Substitutions will not be allowed in meeting requirements of the 41 hour general education core.

## Policy Concerning Student Access to Education Records <br> Definitions

Education Records: Education Records are defined as those records, files, documents, and other materials which (1) contain information directly related to a student; and (2) are maintained by Tennessee State University or by a person acting for the University. "Records" means information recorded in any medium, including, but not limited to the following: handwriting, print, tapes, film, microfilm, and microfiche. Education records do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records, (4) medical and psychiatric records (these are accessible by the student's physician).
Student: A student is any person who is or has been enrolled at Tennessee State University. An applicant who does not enroll or who is declared ineligible has no inherent right to inspect his file. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 52 of the Internal Revenue Code of 1954 and who presents such proof to the custodian of the education records. Normally this proof will be written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.
Directory Information: Directory information is defined as "the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous education agency or institution attended by the student."
At the time a student registers for courses, the student may notify the Office of Admissions and Records (this must be done in writing) that directory information for that student should not be released. This notification is effective only for the one semester for which the student is then registering.
Access: To have access to an education record is to be allowed to see the original record. This implies the right to obtain copies of that record.

Release of Personally Identifiable Student Education Records. Tennessee State University shall not permit access to, or the release of, any information in the education records of any student that is personally identifiable, other than Directory Information, without the written consent of the student, to any other than the following:

1. TSU officials and staff who have legitimate educational interest;
2. Officials of other schools in which the student seeks admission;
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid;
4. Federal or State officials as defined in paragraph 99.37 of the regulations concerning this law;
5. State and local officials authorized by State statute;
6. Organizations conducting studies for, or on the behalf of TSU for the purpose of assisting in accomplishing the University's stated goals, when such information will be used only by such organizations and subsequently destroyed when no longer needed for the intended purpose;
7. Accrediting organizations to carry out their functions;
8. Parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954
(Written consent may be allowed from either separated or divorced parents subject to any agreement between the parents or court order. In the case of a student whose legal guardian is an institution, a party independent of the institution, appointed under State and local law to give parental consent, may be allowed to do so.);
9. In compliance with judicial order or subpoena, provided that the student is notified in advance of the compliance; or
10. Appropriate persons in connection with an emergency if such knowledge is necessary to protect the health or safety of a student or other persons.

NOTE: With the exception of TSU officials and staff, who have been determined by the University to have legitimate educational interest, all individuals and agencies having requested or obtained access to a student's record will be noted in a record which is kept with each student's education record. A request must be in writing stating the purpose of the request. This record will indicate also specifically the legitimate interest that the persons or agencies had in obtaining the information.

## Procedures for Accessing Education Records

The student requests the custodian to allow him to inspect the education record. The student may ask for an explanation and/or a copy of the education record. (The price of copies shall not exceed the cost of duplicating the record.) After consultation with the custodian, errors may be corrected at that time by the custodian.
If there is a disagreement between the student and the custodian, after exhausting reasonable means of reconciliation with the custodian, the student may submit a request for a formal hearing. The request, and the formal challenge to the content of the records, must be presented in writing to the Chairman of the University Appeals Committee. The Chairman shall call a meeting of the committee or place this meeting no later than 45 days after receipt of the written appeal and challenge.
The committee will allow the student to present evidence to substantiate the appeal and shall render a written decision to the student within 45 days after the meeting.

NOTE: This procedure does not provide for a hearing to contest an academic grade.

## Rights of Access Do Not Include

1. Financial records of parents or any information therein;
2. Confidential letters and statements of recommendation which were placed in the education records of a student prior to January 1, 1975;
3. Records to which access has been waived by a student. (This applies only if a student, upon request, is notified of the names of all persons making confidential recommendations and if such recommendations are used solely for the purpose they were intended.)

## Informing Students

TSU shall inform its students of its policy governing "Privacy Rights of Students Education Records" by publishing the policy in the University Catalogs and Class Schedules.

## Applicable Catalog

Students are allowed to graduate under the requirements of the TSU catalog that was current when they entered, provided graduation is within eight (8) years of that entrance date and the program of study is still active.

## Dean's List

To be eligible for the Dean's List, a student (1) must have a minimum cumulative grade-point average of 2.00 \{C\}; (2) must have achieved a grade-point average of not less than 3.00 (B) for a given semester; and (3) must have carried not less than 12 semester hours of college level course work during the semester.

## Degrees with Honors

Bachelors' degrees with honors are awarded cum laude, magna cum laude and summa cum laude. To be graduated cum laude, the student must earn a cumulative average of at least 3.25. To be graduated magna cum laude, the student's cumulative average must be not less than 3.50 . To be graduated summa cum laude, the student's cumulative average must be not less than 3.75.
Students who have participated in the Honors Program will, upon achieving an average of at least 3.25 and meeting other requirements of the Program, be graduated with university honors.

To be eligible for honors, a student must have been in residence for not less than three semesters and must qualify as a suitable representative of Tennessee State University.
Candidates for honors must qualify one semester prior to graduation.

## Philosophy of General Education

Persons today are faced with a demand for a wide range of skills, knowledge, and attitudes. These demands include not only a highly specialized knowledge in a particular field of endeavor, but also a broader range of competencies and appreciations. Universities have the responsibility to assist persons to develop the specialized and general skills, knowledge, and attitudes necessary for leading a humane, responsible, and happy life.

Academic departments with their programs of majors and minors are primarily responsible for developing the highly detailed and specialized skills and knowledge called for in today's world. The general education program fosters those competencies and attitudes which are necessary to the highly educated individual regardless of his or her profession. The general education program, therefore, is not the province of an individual department or college, but is the responsibility of the University as a whole.

In a democracy persons are autonomous individuals, but they are also members of a variety of social groups and citizens of the nation and the world. They are, in addition, creatures in a universe of natural phenomena and are themselves one of the complex phenomena in that universe. Educated persons must have more than an elementary understanding of all of these dimensions of the individual and the world, even if they cannot master the knowledge of all of these dimensions. The persons most likely to function effectively and wisely in the world, and
the ones most likely to understand and appreciate their own and others' full humanity, are those liberally educated individuals who have achieved the following goals:

1. Liberal Learning. An understanding of a variety of intellectual disciplines, including at least one in each of the families of disciplines the humanities and arts, the
social sciences, and the mathematical and natural sciences.
2. Literacy. A command of various modes of communication, including writing, speaking, listening, and computational skills is required.
3. A Tough-Minded Rationality. Ability to define problems, construct logical arguments, and draw reasonable conclusions while at the same time maintaining sensitivity to the creative and individual nature of all thought processes.
4. A Receptivity to Evolving Technologies. An openness to the ever-widening variety of technologies developing world-wide and to the tools and ideas produced by these technologies.
5. Historical Consciousness. An awareness of the continuity of past, present, and future.
6. An Appreciation for Cultural Diversity. Respect-based on understanding and sensitivity-for the cultures produced by all the peoples of the world.
7. Intellectual Integrity. High standards of scholarship and intellectual discipline, as well as an appreciation of knowledge for its own sake.
8. A Habit of Lifelong Learning. Commitment to intellectual curiosity and to education in its many forms as means of pursuing both professional and personal fulfillment.
9. Values. An understanding and appreciation of moral and esthetic values, including how they enrich life and encourage one to live responsibly.
10. Physical and Mental Wellness. A knowledge of the benefits from and means of achieving physical and mental wellness.

## Learning Outcomes and Courses

The General Education Core is designed to provide students with the opportunity to develop, practice, and demonstrate essential competencies, or learning outcomes, in the areas of: (1) oral and written communication, (2) the humanities, (3) the social and behavioral sciences, (4) history, (5) the natural sciences, and (6) mathematics

## General Education Courses Approved Courses for

 General Education Requirements B.S. and /or B.A. Degrees Fall Semester 2004 and After
## Discipline/ Number/Credit Hours / Course Title

Communication - 9 Hours Required:

| ENGL | 1010* | Freshman English I | 3 |
| :--- | :--- | :--- | :--- |
| ENGL | $1020^{*}$ | Freshman English II | 3 |
| COMM | $2200^{*}$ | Public Speaking | 3 |

*These three courses are required for all majors for the 120 hour curriculum.

Humanities and/or Fine Arts- (9-hours) required
*Of nine required hours, three hours must be one of listed sophomore literature courses.

| ART | 1010 | Art Appreciation | 3 |
| :--- | :--- | :--- | :--- |
| ENGL | $2110^{*}$ | American Literature | 3 |
| ENGL | $2310^{*}$ | World Literature I | 3 |
| ENGL | $2012^{*}$ | Literary Genres I | 3 |
| ENGL | $2013^{*}$ | Black Arts and Literature I | 3 |
| ENGL | $2210^{*}$ | Survey of English Lit. I | 3 |
| ENGL | $2120^{*}$ | American Literature II | 3 |
| ENGL | $2320^{*}$ | World Literature II) | 3 |
| ENGL | $2022^{*}$ | Literary Genres II | 3 |


| ENGL | 2023* | Black Arts and Literature II | 3 |
| :---: | :---: | :---: | :---: |
| ENGL | 2220* | Survey of English Lit. II | 3 |
| HIST | 1000 | Global Culture in History | 3 |
| MUSC | 1010 | Music Appreciation | 3 |
| PHIL | 1030 | Introduction to Phil | 3 |
| RELS | 2010 | Introduction to Religious Studies | 3 |
| THTR | 1020 | Appreciation of Drama | 3 |
| AREN | 2310 | Architectural History | 3 |
| Social and Behavioral Sciences- (6-hours) required |  |  |  |
| AFAS | 2010 | Intro. to Africana Studies | 3 |
| ANTH | 2300 | Intro. to Cultural Anthropology | 3 |
| ECON | 2010 | Principles of Economics I | 3 |
| ECON | 2020 | Principles of Economics II | 3 |
| GEOG | 1010 | World Regional Geography I | 3 |
| GEOG | 1020 | World Regional Geography II | 3 |
| HPSS | 1510 | Health and Wellness I | 3 |
| POLI | 2010 | American National Government | 3 |
| POLI | 1010 | Introduction to Political Science | 3 |
| PSYC | 2010 | General Psychology | 3 |
| SOCI | 2010 | Introduction to Sociology | 3 |
| WMST | 2000 | Intro. To Women's Studies | 3 |
| URBS | 2010 | Intro. To Urban Studies (effective, Fall 2011) | 3 |
| History- (6-hours) required |  |  |  |
| HIST | 2010 | American History I | 3 |
| HIST | 2020 | American History II | 3 |
| HIST | 2050 | World History I | 3 |
| HIST | 2060 | World History II | 3 |
| HIST | 2700 | African American Experience | 3 |
| HIST | 2030* | History of Tennessee | 3 |

*HIST 2030 may be taken as a substitute for either American history course

Natural Sciences- (8-hours) required

| ASTR | 1010 | Introduction to Astronomy I | 4 |
| :--- | :--- | :--- | :--- |

ASTR 1020 Introduction to Astronomy II4

Natural Sciences- (8-hours) required (Continue)

| BIOL 1010/1011 | $\begin{array}{l}\text { Introductory Biology I for Non- } \\ \text { Science Majors }\end{array}$ |
| :--- | :--- |
| In |  |

BIOL 1020/1021 Introductory Biology II for Non- 4/0
BIOL 1110/1111 General Biology I for Science 4/0
BIOL 1120/1121 General Biology II for Science $4 / 0$
BIOL 2210/2211* Human Anatomy and Physiology 4/0
I/Lab
BIOL 2220/2221* Human Anatomy and Physiology 4/0
II/Lab
CHEM 1030/1031 General Chemistry I for Non- 3/1
CHEM 1040/1041 General Chemistry II for Non- 3/1
CHEM 1110/1111 General Chemistry I for Science 3/1
CHEM 1120/1121 General Chemistry II for Science 3/1
PHYS $1030 \quad$ Conceptual Physics 4
PHYS 2020/2021 College Physics II 3/1
PHYS 2030/2031 General Physics I 3/1
PHYS 2040/2041 General Physics II 3/1
*BIOL 2210/2211 and BIOL 2220/2221 approved to meet General Education requirements only for students in Nursing and Health Sciences majors.
*BIOL 2010/2011 and BIOL 2020/2021 may be accepted for transfer students.

Mathematics- (3-hours required

| MATH 1013 | Contemporary Mathematics | 3 |
| :--- | :--- | :--- |
| MATH 1110 | College Algebra I | 3 |
| MATH 1120 | College Algebra II | 3 |
| MATH 1410 | Structure of the Number System I | 3 |
| MATH 1710 | Pre-Calculus Mathematics I | 3 |
| MATH 1720 | Pre-Calculus Mathematics II | 3 |
| MATH 1730 | Pre-Calculus Mathematics | 3 |
| MATH 1830 | Basic Calculus I | 3 |
| MATH 1910 | Calculus I, Alternate | 4 |
| MATH 1915 | Calculus and Analytical Geometry I | 4 |

Honors sections of the above referenced courses may also be used to meet General Education requirements. No course substitutions will be allowed in the approved general education core.

For transfer students, equivalencies will be reviewed and applied to meet general education requirements as approved by the department.

## University Requirements for a Bachelor's Degree

A bachelor's degree is conferred on students who are officially enrolled for the intended semester of graduation and who satisfactorily complete a curriculum in one of the departments or programs. Students should consult the curriculum requirements for their specific program in the appropriate departmental section of the Catalog (consult Index). All candidates for a bachelor's degree must also satisfactorily complete each of the requirements of the University as listed below.

1. A minimum of 120 semester hours ( 128 for College of Engineering-engineering programs only) 122 for Biology and 124 for Teacher Education Programs) with a minimum cumulative average of "C" (2.00 quality point average). Students must meet all specific minimum hours for graduation, retention requirements and GPA graduation requirements as included in each program description.
2. A minimum of 42 semester hours must be earned at the 3000 and 4000 level of courses
3. A minimum of 24 semester hours in a major with a minimum of 21 hours at the 3000 and 4000 level. Minimum number of hours as specified by major program of study must be attained.
4. Nine semester hours in courses designated as Communication. Of these 9 hours, six semester hours must be in English composition (ENGL 1010 and 1020 ). Students must earn at least a "C" in each of these courses; if they earn less than a "C" in either course, they must enroll in that course the following semester and repeat it until they raise their grade to at least a "C." An additional requirement for Communication is a three semester hour in Speech (COMM 2200).
5. Nine semester hours in humanities, including at least three semester hours in sophomore literature, from the approved General Education list. The remaining six hours may include one other sophomore literature course and one other
approved course from other humanities disciplines as listed in the chart.
6. Six semester hours of introductory-level social behavioral science as listed in the chart.
7. Six semester hours of a survey of American history (HIST 2010 and 2020). One semester of Tennessee history (HIST 2030) may be substituted for three of these hours. English Composition I and II (ENGL 1010 and 1020) are prerequisites for American History and must be successfully completed prior to enrollment.
8. Eight semester hours in natural sciences with accompanying taken during the same semester as listed in the chart. Students may not take a sequence of BIOL 1010/BIOL 1110; BIOL 1020/BIOL 1120; CHEM 1030/CHEM 1110; CHEM 1040/CHEM 1120.
9. Three semester hours in mathematics from the approved list of General Education courses.
10. A (1) credit hour Orientation course is required for all students including transfer students who transfer in less than 60 credit hours from other colleges and universities.
11. A Senior Project or Senior Seminar.
12. For programs requiring 120 hours for graduation, at least one academic year in residence and at least 30 semester hours of credit earned in residence with a minimum quality point average of "C" (2.00) are required. For programs over 120 hours, a minimum of 25 percent of the total hours required for any specific degree must be taken in residence at Tennessee State University. Upon matriculation at the University, transfer hours must be approved in writing in advance by the department chair and the dean of the school or college in which the student is earning the degree. Additionally, the student must earn the last 30 hours needed for graduation in residence at TSU. Six (6) of these hours may be taken at another institution with prior written permission from the departmental advisor.
13. A degree seeking student may not register concurrently at Tennessee State University and at another institution and receive transfer credit for work taken at the other institution unless permission is granted in advance by the Dean of the school. This applies to correspondence, extension, electronically delivered, or evening courses as well as to regular courses in residence. In no instance can a student receive credit for more than 21 hours in a given semester.
14. All students must be admitted to the upper division or professional component of their major. This is normally done in the second semester of the sophomore year, or when approximately 60 hours of degree level credits have been accumulated. Students who change their majors must meet upper division admission requirements in effect for the new major at the time they seek admission to the upper division or professional component for the new major, as opposed to requirements in effect when they entered the University. Upper division admission requirements are specified by each department.
15. Students electing to change their major will be required to meet all general education and major requirements listed in the catalog effective at the time they officially change their major.
16. All students are required to take the Senior Exit Exam and any required program major field test exams prior to graduation.
17. It is the student's responsibility to satisfy all degree requirements specified in his/her selected major, minor,
concentration. The University does not assume any responsibility for fees or charges based on a student's claim of inadequate advisement. Students are responsible for reading and following the applicable catalog.
18. Students must be degree seeking. Non-degree seeking and special students do not qualify.
*Students for whom transfer equivalence of " $A$ ", " $B$ ", or " $C$ " in ENGL1010 and 1020 has been accepted by the University will be determined to have satisfied the English Proficiency requirement. A transfer student with a grade of "D" or "F" in either course must repeat it until a minimum grade of "C" is achieved. Any transfer student for whom there is a question in English Proficiency will be required to complete a writing sample which is scored holistically. Transfer students who have not demonstrated English Proficiency must remove the deficiency during the first semester in residence. All nontransfer students must complete the English Proficiency requirement no later than the end of the sophomore year.

## Tennessee Board of Regents' Minimum Degree Requirements:

All universities and community colleges in the Tennessee Board of Regents (TBR) system share a common set of minimum requirements for the baccalaureate degrees or associate degrees designed for transfer. Every TBR institution incorporates the 41 hour General education core and accepts all courses designated as meeting these requirements from other TBR institutions. By insuring the transferability of course fulfilling the Minimum Degree requirements, the TBR has
eliminated unnecessary repetition of courses by students transferring within the TBR system. A complete list of courses that satisfy the Minimum Degree Requirements at all TBR institutions is available on the TBR web page. (www.tbr.state.tn.us)

## University Requirements for a Bachelor of Arts Degree

In addition to the University Requirements for a Bachelor's Degree, spelled out above, students who seek the Bachelor of Arts degree all candidates must obtain equivalency through the intermediate level (courses numbered 2010 and 2020 or the equivalent) in a single foreign language at the college level. Students who achieve advanced placement in a foreign language as a result of previous competency must still meet the minimum 120 hour requirements of that program of study.

## Second Major

A second major can be earned under the same degree by meeting the following requirements:

1. Meet all requirements for the major listed in the Catalog at the time of admission to the program.
2. Complete an application with the department chair of both majors requesting permission to pursue a second major.
3. Must complete all general education courses required for both majors when applicable.

## Second Associate Degree

A student must complete the curriculum prescribed for the second degree, with at least 24 semester hours in residence over and above the total number of hours completed for the first degree. The student must declare a second major and be advised by both departments.

## Dual Degree Option

A student may pursue dual degree objectives (second or double major) through declaring a major in each department offering the degree sought. The student must have a major advisor assigned from both departments and must meet all requirements for both degrees. Both degrees will be posted on the student's transcript and a diploma will be issued for each degree. The dual degree objective should be declared as early as possible in the student's matriculation.

## Second Bachelors Degree

All students who hold a baccalaureate degree from a regionally accredited institution of higher education* may earn another bachelor's degree in a different discipline by satisfying the following requirements:

- Must have minimum GPA as required for full admission into the upper division program for second degree.
- Complete all requirements for the major as determined by the department in which the second baccalaureate degree is sought.
- Complete a minimum of 30 semester hours in residence at TSU

Any general education courses that are pre-requisites for progression in the major program must be completed as specified by the department. If the first baccalaureate degree is from a non-U.S. university, the student must complete ESL 1010, 1020, and/or pass the English Placement Test.

Earn a minimum cumulative grade point average of 2.0 and a minimum GPA of 2.0 in all coursework taken at Tennessee State University. If program minimum grade point average for graduation is higher than 2.0, the student must attain the posted required minimum GPA.
*American institutions must be regionally accredited, and foreign institutions must be approved as "reputable" through consultation with the Director of International Student Affairs, the relevant TSU department chairs, and appropriate faculty members.

## Advanced Graduate Admission for Undergraduates

An undergraduate senior student with a minimum total cumulative GPA of 3.0 who is enrolled in the last term of course work that will complete the requirements for a bachelor's degree, may request advanced graduate admission to enroll in 3 to 6 hours of graduate courses provided the total course load of graduate and undergraduate credit for the semester does not exceed twelve hours. Courses for seniors
are limited to first-year graduate level courses. Graduate courses may not be used for credit toward an undergraduate degree. The Combination Senior is not considered a graduate student but may apply for admission to a graduate program upon completion of the bachelor's degree. However, advanced admission to take graduate courses does not guarantee subsequent admission to a graduate program. Courses taken for graduate credit may count toward a graduate degree when/if the student is admitted to a degree program at TSU and if approved by the program's graduate coordinator and departmental Chairperson. The form for Advanced Graduate Admission and an Application to the Graduate School must be completed six weeks prior to the beginning of the semester in which advanced admission is sought.

## Maximum External Credit Allowed From Various Sources for the Associate Degree Program at Tennessee State University

No more than a total of 30 semester hours of credit can be granted by a state university through any combination of external sources (Advanced Placement Program and CollegeLevel Examination Program of the College Entrance Examination Board). Credit by examination is determined by University policy as stated in the University Catalog. Should a student be granted the maximum total of 30 semester hours of credit through external sources, he/she must still complete all specific degree requirements as given in an outlined Program of Study in order to receive an associate degree at TSU. Students must meet the 24 semester hour residence requirement, and a minimum of 20 of the final 26 hours must be completed at Tennessee State University.

## Requirements for the Associate Degree

The University requirements for an associate degree are as follows:

1. Completion of at least 60 semester hours of credit. Students must complete the minimum number of hours as stated in the departmental Program of Study and meet all retention and graduation policies as stated in that program.
2. Completion of $15-17$ hours of approved general education core including a) ENGL 1010 and an approved course in b) Humanities, c) Math or Natural Science, d) Social Science e) another approved course from either of the five disciplines.
3. A minimum quality point average of "C" (2.00).or higher as set in specific program requirements.
4. Completion of a minimum of 20 of the final 26 semester hours of course work in residence at TSU. Transfer hours in the final 26 hours must be approved in advance in writing by the Department Chair of the department and the dean of the school or college in which the degree will be awarded.
5. Completion of specific course requirements as outlined in the student's Program of Study. Substitutions must be approved in advance in writing by the Department Chair of the department and the dean of the school or college in which the degree is to be awarded.

General Education Requirements for the Associate of Applied Science Degree:

Communications 3-Hours
English 1010 3-Hours
Humanities 3-Hours

Three Hours from Approved list: Social Behavioral Sciences 3-Hours

Three hours from the approved list:
Natural Science or Math 3 or 4 hours

- Natural Sciences (4 hours) from approved list or
- 3-4 hours from approved Mathematics list
- Other 3-4 Hours

One additional course required from either of the categories list above. See departmental requirements.

Total Required: 15-17 hours
(No course substitutions will be allowed in the approved general education core.)
*The removal of High School deficiencies is not required for the Associates Degree.

## Falsifying Academic Records

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to secure employment at or admission to an institution of higher education in Tennessee, represents, orally or in writing that such person:

1. Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas from an accredited institution of higher education;
2. Has successfully completed the required course work for and has been awarded one (1) or more degrees for diplomas from a particular institution of higher education; or
3. Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

## Academic Colleges, Schools, and Programs

This section includes information on the following:

- COLLEGE OF AGRICULTURAL, HUMAN AND NATURAL SCIENCES
- COLLEGE OF BUSINESS
- COLLEGE OF EDUCATION
- COLLEGE OF ENGINEERING
- COLLEGE OF HEALTH SCIENCES
- COLLEGE OF LIBERAL ARTS
- COLLEGE OF PUBLIC SERVICE AND URBAN AFFAIRS
- AEROSPACE STUDIES
- THE SCHOOL OF GRADUATE STUDIES
— UNIVERSITY HONORS PROGRAM
- TESTING CENTER


## Academic Abbreviations

| ACCT | Accounting | HIST | History |
| :---: | :---: | :---: | :---: |
| AREN | Architectural Engineering | HLSC | Health Sciences |
| AERO | Aerospace Studies | HMGT | Home Management |
| AFAS | Africana Studies | HONR | Honors Program |
| AGSC | Agricultural Sciences | HPSS | Human Performance Sport Sciences |
| HLSC | Allied Health Professions | COMM | Journalism, Speech |
| AITT | Aeronautical and Industrial Technology | MATH | Mathematics |
| ANTH | Anthropology | MEEN | Mechanical Engineering |
| ART | Art | MFLA | Modern Foreign Languages |
| ASOR | Liberal Arts Orientation | MGMT | Management |
| BISE | Business Information Systems Education | MKTG | Marketing |
| BISI | Business Information Systems Industry | MSVU | Military Science, Vanderbilt University |
| BIOL | Biology, Botany, Microbiology, Science | MUSC | Music |
| BLAW | Business Law | NUFS | Nutrition |
| BSUS | Urban Studies | NURS | Nursing |
| CRCS | Cardio-Respiratory Care Sciences | HPSS | Physical Education |
| CVEN | Civil Engineering | INBU | International Business |
| CHEM | Chemistry | PHIL | Philosophy |
| CRMJ | Criminal Justice | PHYS | Physics |
| COOP | Cooperative Education | POLI | Political Science |
| COMP | Computer Science | PSYC | Psychology |
| DHYG | Dental Hygiene | PHTH | Physical Therapy |
| DIGN | Design | REUD | Real Estate |
| ECON | Economics | RELS | Religious Studies |
| ECCD | Early Childhood, Child Development | COMM | Radio and Television |
| EDAD | Educational Administration | SOCl | Sociology |
| EDCI | Education, Curriculum and Instruction | COMM | Speech |
| EDRD | Education Reading | SPAN | Spanish |
| EDSE | Education, Special Education | SPTH | Speech Pathology and Audiology |
| EECE | Electrical Engineering | STAT | Statistics |
| ENGL | English | SOWK | Social Work |
| ENGR | Engineering | THTR | Theatre |
| FCS | Family and Consumer Sciences | URBS | Urban Studies |
| FINA | Finance | WMST | Women's Studies |
| FREN | French |  |  |
| GEOG | Geography |  |  |
| HCAP | Health Care Administration and Planning |  |  |
| HIMA | Health Information Management |  |  |

# The College of Agriculture, Human and Natural Sciences 

Chandra Reddy, Ph.D., Dean<br>Director of Research and Administrator of Extension 213 Biotechnology Building

Mission Statement: The mission of the College of Agriculture, Human and Natural Sciences at Tennessee State University is to explore the functionality of the institution's land grant status in seeking and applying knowledge in four integrated programs; Agriculture and Environmental Sciences; Biological Sciences; Chemistry and Family and Consumer Sciences as a basis for sustainable improvements in the lives of people in Tennessee, the rest of the nation and throughout the world.
General Statement: The College of Agriculture, Human and Natural Sciences is the premier land-grant unit of Tennessee State University. As such, the College undertakes teaching, research and extension functions through four academic departments - the Department of Agricultural and Environmental Sciences, the Department of Biological Sciences, the Department of Chemistry and the Department of Family and Consumer Sciences. The departments offer five Bachelor of Science degrees with majors in Agricultural Sciences, Biological Sciences, Chemistry, Family and Consumer Sciences, and Early Childhood Education. The major in Agricultural Sciences offers the following concentrations: Agribusiness, Agricultural Education, Animal Science \& Pre-veterinary Medicine, Agricultural Biotechnology, Applied Geospatial Information Systems (GIS), Food Bioscience and Technology, and Plant and Soil Science. The major in Biological Sciences offers the following concentrations: General Biology, Cellular and Molecular Biology and Biology with Teacher Certification. The major in Chemistry offers the following concentrations: Professional Chemistry, Biochemistry, and Chemistry with Teacher Certification. The major in Family and Consumer Sciences offers the following majors or concentrations: Early Childhood Education (PreK-3 certification) and Family and Consumer Sciences with concentration in one of the following: Child Development and Family Relations, Design, Fashion Merchandising, Family and Consumer Sciences Education, Foods and Nutrition (Dietetics), and Food Service Management.
Departmental Requirements: The requirements for each program are listed under the respective Department.

## Department of Agricultural and Environmental Sciences

Samuel Nahashon, Ph.D., Interim Department Chair 108 Lawson Hall

Faculty: D. Abbas Saleh, A. Aziz, T. Brooyles, R. Browning, A. Clardy, S. Comer, J. DeKoff, S. Dennis, D. Duseja, C. Dumenyo, E. Dzantor, E. Ekanem, S. Haile, J. Hall, W. Hayslett, P. Illukpitiya, M. Lema, L. Li, T. Miller, M. Mmbaga, S. Nahashon, D. Nandwani, D. Pitchey, B. Pokharel, C. Reddy, J. Ricketts, G. Smith, S. Speight, Y. Wu, and D. Young

## Departmental Goals:

1. To maintain a responsive teaching and learning environment
2. To attract, retain and graduate outstanding students
3. To advance biotechnology and biodiversity
4. To ensure the viability of small-scale agriculture
5. To protect the environment and natural resources
6. To use innovative technologies in our academic programs

Departmental objectives:

1. To recruit high quality students, follow their progress through the program, and insure that they graduate in a timely manner with high levels of achievement;
2. To produce graduates who have the capability to apply the concepts of the agricultural sciences to solving problems encountered in government, education, industry, and society in general;
3. To produce graduates who have in-depth knowledge and experience in the agricultural sciences, and expertise in their chosen field;
4. To produce graduates who are capable of evaluating and defining diverse problems, evaluating and developing feasibility studies, analyzing and interpreting data, and developing, implementing, and evaluating acceptable solutions to professional problems;
5. To produce graduates who are able to communicate information to diverse groups at all levels of expertise;
6. To produce graduates who are capable of using computer-based information systems to solve problems;
7. To produce graduates who understand their responsibility to their profession, to society in general, and to the furtherance of life-long learning;
8. To produce graduates capable of functioning successfully on multi-disciplinary teams and;
9. To produce graduates capable of further graduate studies.
Student Learning Outcomes:
10. The capability to apply the concepts in agricultural sciences to solving problems encountered in government, education, industry, and society in general;
11. In-depth knowledge and experience in the agricultural sciences in general, and expertise in their concentration of choice;
12. The capability to evaluate and define diverse problems;
13. The capability to evaluate and develop feasibility studies;
14. The capability to analyze and interpret data;
15. The capability to develop, implement, and evaluate acceptable solutions to professional problems;
16. The ability to communicate information to diverse groups at all levels of expertise;
17. The capability to use computer-based information systems to solve problems;
18. An understanding of responsibility to their profession, to society in general, and to the furtherance of lifelong learning;
19. An understanding of and a commitment to personal and professional ethics;
20. The capability to function successfully on multidisciplinary teams and;
21. The capability to successfully pursue graduate studies.

General Statement:
The curricula in the Department of Agricultural and Environmental Sciences are designed to provide both liberal and specialized education for students who seek to advance their education in the field of agriculture. The program in liberal education involves the social sciences, the natural sciences, the humanities and the arts, and is designed to prepare students to understand and function in a very complex environment. The specialized program is designed to provide understanding and training in the complex scientific field of agriculture. The overall program offers curricula leading to the Bachelor of Science (B.S.) degree in Agricultural Sciences, with concentrations in Agribusiness, Agricultural Education, Animal Science/Pre-Veterinary Medicine, Agricultural Biotechnology, Food Bioscience and Technology, Geospatial Information Systems, and Plant and Soil Science.

No grade less than "C" in any major course (Agricultural Sciences course) will be accepted as credit toward meeting departmental requirements.

## Upper Division Policy

Students majoring in Agricultural Sciences must gain upper division status before enrolling in any upper division courses ( 3000 \& 4000 levels). Upper division courses taken prior to being given upper division status may not be accepted towards the B.S. degree. Students may be admitted to the upper division after completing at least 60 degree-level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0. It is the responsibility of the student to submit a formal petition to the department. Such petition will be reviewed by a departmental committee to ensure that all criteria have been met.

## Departmental Requirements:

- For Bachelor of Science Agricultural and Sciences

Major Core: A minimum of 17 semester hours including, AGSC I200, 1410, 2010 or 2020, 2040, 4500, 4710, and UNIV 1000.

General Education: 41 semester hours including: Communications - 9 hours - ENGL 1010,1020, COMM 2200; Humanities and/or Fine Arts - 9 hours - ENGL 2010-2024 (3 hours), ART 1010, MUSC 1020, or PHIL 2010; Social \& Behavioral Sciences - 6 hours - SOCI 2010, PSYC 2010 or ECON 2010 \& 2020; History - 6 hours - HIST 2010, 2020 or 2030; Natural Sciences - 8 hours - CHEM 1110/1111 \& $1120 / 1121$ or BIOL 1110/1111 and 1120/1121 and Mathematics - 3 hours - MATH 1110.

## Bachelor of Science Degree in Agricultural Sciences Concentration in Agri-business Suggested Four Year-Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | MATH 1830 | 3 |
| MATH 1110 | 3 | AGSC 1200 | 3 |
| AGSC 1410 | 3 | AGSC 2020 | 3 |
| AGSC 2010 | 3 | Humanities Elective | 3 |
| AGSC 2040 | 3 |  |  |
|  | 16 |  | 15 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010-2018 | 3 | BIOL 1020, 1021 | 4 |
| BIOL 1010, 1011 | 4 | HIST 2020 | 3 |
| HIST 2010 | 3 | COMM 2200 | 3 |
| ACCT 2010 | 3 | AGSC Elective | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
|  | 16 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 3000 | 3 | AGSC 3010 | 3 |
| AGSC 3040 | 3 | AGSC 3030 | 3 |
| AGSC 3120 | 3 | AGSC 3130 | 3 |
| Humanities Elect. | 3 | MGMT 3010 | 3 |
| AGSC Elective | 4 | AGSC Elective | 3 |
|  | 16 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 40I0 | 3 | AGSC 4020 | 3 |
| AGSC 4500 | 3 | AGSC 4040 | 3 |
| AGSC 4710 | 1 | AGSC 4080 | 3 |
| Electives | 3 | Electives | 3 |
| Guided Electives | 3 | AGSC 4720 | 1 |
|  | 13 |  | 13 |

Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Education Suggested Four-Year Plan

|  | FRE | SMMAN YEAR |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | AGSC 1200 | 3 |
| AGSC 1410 | 3 | MUSC 131 | 3 |
| AGSC 2010 | 3 | CHEM 1110/1111 | 4 |
| MATH 1110 | 3 | AGSC 2410 | 3 |
| BIOL 1110/1111 | 4 |  |  |
|  | 17 |  | 16 |
|  | SOPH | OMORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ECON 2010 | 3 | PSYC 2010 | 3 |
| HIST 2010 | 3 | EDIC 2010 | 3 |
| COMM 2200 | 3 | HIST 2020 | 3 |
| AGSC Elective | 3 | ENGL 2010/2020 | 3 |
| PSYC 2420 | 3 | AGSC Elective | 3 |
|  | 15 |  | 15 |
|  |  | NIOR YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| EDSE 3330 | 3 | EDCI 3110 | 3 |
| AGSC 2040 | 3 | AGSC 3050 | 3 |
| AGSC 3460 | 3 | AGSC 3601 | 3 |
| EDRD 4910 | 3 | AGSC 3060 | 3 |
| PSYC 3120 | 3 | AGSC Guided Elective | 3 |
|  | 15 |  | 15 |
|  |  | NIOR YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 3070 | 3 | AGSC 4050 | 9 |
| AGSC 3185 | 3 | EDCI 4705 | 3 |
| AGSC 3080 | 3 | AGSC 3090 | 3 |
| AGSC 4500 | 3 |  |  |
|  | 12 |  | 15 |

Guided Electives for Certification, Guided Electives for nonAgricultural Education Certification: Agricultural (30 semester hours); Education ( 30 semester hours); EDAD 4000; AGSC 3000, 3010, 3020, 3030, 3040; EDCI 3110, 3120, 3130, 3200, 3210, 3220, 3230; EDRD 4910, 3240, 3320, 3330, 3340, 3350, 3400; EDSE 3330, 3420, 3430, 3440, 3450, 4010, 4040; PSYC 3120, 4070, 4080, 4090, 4230, 4250, 4260; EDCU 420A, 4310, 4430; AGSC 4500

Bachelor of Science Degree in Agricultural Sciences Concentration in Animal Science Emphasis Suggested Four Year-Plan

|  | R | AR |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | BIOL 1110, 1111 | 4 |
| CHEM 1110, 1111 | 4 | AGSC 1200 | 3 |
| MATH 1110 | 3 | CHEM 1120, 1121 | 4 |
| AGSC 1410 | 3 | Humanities Elective | 3 |
|  | 15 |  | 15 |
|  | SOPHO | OMORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MATH 1140 or | 3 | HIST 2020 | 3 |
| MATH 1830 |  |  |  |
| AGSC 2010 or 2020 | 3 | Social/Behav. Elect. | 3 |
| COMM 2200 | 3 | Humanities Elective | 3 |
| HIST 2010 | 3 | Social/Behav. Elect. | 3 |
| AGSC 2040 | 3 | CHEM 2010, 2011 | 4 |
|  | 15 |  | 16 |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 3120 | 3 | AGSC 3400 | 3 |
| AGSC 4710 | 1 | AGSC 3420 | 3 |
| Guided Elective | 4 | AGSC 3430 | 3 |
| Humanities Elective | 3 | CHEM 3410, 3411 | 4 |
| AGSC 3410 | 3 | Guided Elective | 3 |
|  | 14 |  | 16 |
|  |  |  |  |
| FALL SEMESTER | HENIOR YEAR | SPRING SEMESTER | HR. |
| AGSC 4080 | 3 | AGSC 4500 | 3 |
| AGSC 4440 | 3 | Guided Elective | 3 |
| AGSC 4430 | 3 | Guided Elective | 3 |
| Guided Elective | 3 | Guided Elective | 3 |
| Guided Elective | 3 | AGSC 4720 | 1 |
|  | 15 |  | 13 |

Guided Electives: 22 Credit Hours from the courses listed: AGSC 2510, 3000, 3010, 3440, 3450, 3470, 3480, 3500, 3510, 3520, 3601, 4410, 4420, 4450, BIOL 1120+1121

Bachelor of Science Degree in Agricultural Sciences PreVeterinary Medicine Emphasis Suggested Four Year-Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | BIOL 1110, 1111 | 4 |
| CHEM 1110, 1111 | 4 | AGSC 1200 | 3 |
| MATH 1110 | 3 | CHEM 1120, 1121 | 4 |
| AGSC 1410 | 3 | Humanities Elective | 3 |
|  | 14 |  | 17 |

SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :---: | :---: | :---: | :---: |
| MATH 1140 or | 3 | HIST 2020 | 3 |
| MATH 1830 |  |  |  |
| AGSC 2010 or 2020 | 3 | AGSC Elective | 3 |
| BIOL 1120, 1121 | 4 | Social/Behav. Elect. | 3 |
| COMM 2200 | 3 | Humanities Elective | 3 |
| HIST 2010 | 3 | CHEM 2010, 2011 | 4 |
|  | 16 |  | 16 |
|  | JUNIOR YEAR |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| CHEM 2020, 2021 | 4 | AGSC 3400 | 3 |
| AGSC 4710 | 1 | BIOL 2110, 2111 or <br> BIOL 2400, 2401 | 4 |
| AGSC 2040 | 3 | PHYS 2020, 2021 | 4 |
| PHYS 2010, 2011 | 4 | CHEM 3410, 3411 | 4 |
| AGSC 3410 | 3 |  |  |
|  | 15 |  | 15 |
|  | SENIOR YEAR |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| Social/Behav. Elect. | 3 | AGSC 4500 | 3 |
| AGSC 4440 | 3 | AGSC 3430 | 3 |
| AGSC 4430 | 3 | AGSC 3420 | 3 |
| AGSC 3120 | 3 | Guided Elective | 3 |
|  |  | Guided Elective | 3 |
|  | 12 |  | 15 |

Guided Electives: 5 Credit Hours from the courses listed below (AGSC 2510, 3000, 3010, 3440, 3450, 3470, 3480, 3500, 3510, 3520, 3601, 4410, 4420, 4450, 4080)

Bachelor of Science Degree in Agricultural Sciences Concentration in Food Bioscience and Technology Suggested Four Year-Plan

## FRESHMAN YEAR

FALL SEMESTER HR. SPRING SEMESTER HR.
UNIV 10001 ENGL 10203
ENGL 10103 AGSC 12003

COMM 22003 AGSC 22003
MATH 11103 Humanities Elective 3

AGSC1410 3
AGSC $2010 \quad \frac{3}{16}$

$$
12
$$

## SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| ENGL 2010-2028 | 3 | CHEM 1120, 1121 | 4 |
| CHEM 1110,1111 | 4 | SOCI 2010 | 3 |
| AGSC 2040 | 3 | BIOL 1110, 1111 | 4 |
| Humanities Elective | 3 | Behavioral Elective | 3 |
| HIST 2010 | $\frac{3}{\text { HIST 2020 }}$ | 3 |  |
|  |  |  | 17 |

JUNIOR YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
CHEM 2110, 21114 CHEM 2120, 21214
AGSC 35003 AGSC 35103
BIOL 2400, 24014 AGSC 35203
AGSC 35303 AGSC 31204
$\begin{array}{lll}\text { AGSC } 3690 & \frac{3}{17} & \text { AGSC } 3020 \\ \frac{3}{17}\end{array}$
SENIOR YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.

| AGSC 4030 | 4 | AGSC 4460 | 3 |
| :--- | :---: | :--- | :---: |
| AGSC 4280 | 3 | AGSC 4500 | 3 |
| CHEM 3410, 3411 | 4 | CHEM 3420 | 3 |
| AGSC 4710 | 1 | ASCG Electives | $\frac{3}{12}$ |

Bachelor of Science Degree in Agricultural Sciences Concentration in Applied Geospatial Information Systems Suggested Four Year-Plan

FRESHMAN YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :---: | :---: | :---: | :---: |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | AGSC 1200 | 3 |
| MATH 1110 | 3 | GEOG 1020 | 3 |
| GEOG 1010 | 3 | AGSC 2200 | 4 |
| AGSC 1410 | 3 | AGSC 2510 | 4 |
| AGSC 2010 | 3 |  |  |
|  | 16 |  | 17 |
|  | SOPH | OMORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010 | 3 | HIST 2020 | 3 |
| CHEM 1010 or BIOL 1010 | 3 | Humanities Elective | 3 |
| CHEM 1011 or BIOL 1011 | 1 | CHEM 1020 or BIOL 1020 | 3 |
| COMM 2200 | 3 | CHEM 1021 or BIOL 1021 | 1 |
| HIST 2010 | 3 | Humanities Elective | 3 |
| AGSC 3200 | 4 | Social/Behav. Elect. | 3 |


| FALL SEMESTER | JUNIOR YEAR |  | HR. |
| :---: | :---: | :---: | :---: |
|  | HR. | SPRING SEMESTER |  |
| Social/Behav. Elect. | 3 | AGSC 3580 | 3 |
| AGSC 3350 | 3 | AGSC 3590 | 3 |
| AGSC 3550 | 3 | AGSC 3600 | 3 |
| AGSC 3560 | 3 | AGSC 3340 | 3 |
| AGSC 3570 | 3 |  |  |
|  | 15 |  | 12 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 4230 | 4 | AGSC 4530 | 3 |
| AGSC 4500 | 3 | AGSC 4540 | 3 |
| AGSC 4510 | 3 | AGSC 4550 | 3 |
| AGSC 4520 | 3 | AGSC 4560 | 3 |
| AGSC 4710 | 1 | AGSC 4720 | 1 |
|  | 14 |  | 13 |

Bachelor of Science Degree in Agricultural Sciences Concentration in Agricultural Biotechnology Suggested Four Year-Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| MATH 1110 | 3 | Social/Behavioral Science Elective | 3 |
| UNIV 1000 | 1 | Humanities Elective | 3 |
| AGSC 1410 | 3 | AGSC 1200 | 3 |
| Humanities Elect. | 3 |  |  |
|  | 17 |  | 16 |


| SOPHOMORE YEAR |  |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| COMM 2200 | 3 | ENGL 2110-2230 | 3 |
| AGSC 2010 | 3 | Social/Behavioral | 3 |
|  |  | Science Elective |  |
| HIST 2010 | 3 | HIST 2020 | 3 |
| AGSC 2040 | 3 | Humanities Elective | 3 |
| BIOL 1110/1111 | 4 | BIOL 2110/2111 | 4 |
|  | 16 |  | 16 |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 3710 | 3 | AGSC 3540 | 3 |
| AGSC 3270 | 3 | AGSC 3110 | 4 |
| BIOL 2120/2121 | 4 | CHEM 3410 | 3 |
| AGSC 2600 | 4 | BIOL 3410/3411 or | 4 |
|  |  | BIOL 3400/3401 |  |
|  |  |  | 14 |


|  | SENIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 4710 | 1 | CHEM 4700 or |  |
|  |  | CHEM 2100 | 3 |
| BIOL 4110, 4111 | 4 | AGSC 4500 |  |
| AGSC 4280 | 3 | BIOL 4112 | 3 |
| AGSC 4270 | 3 | AGSC 3110 | 3 |
| CHEM 2010 | 3 |  |  |
|  | 14 |  | 13 |

Electives:

| Course Num. | Course Title |
| :--- | :---: |
| AGSC 2200 | Fundamentals of Soil Science |
| AGSC 3210 | Principles of Crop Science |

AGSC 3260

| Plant Physiology | 3 |
| :--- | ---: |
| Plant Pathology | 3 |
| Propagation of Horticultural Plants | 3 |
| Animal and Plant Genetics | 3 |
| Anatomy and Physiology of | 3 |
| Domestic Animals |  |
| Animal Health and Disease | 3 |
| Prevention | 3 |
| Food Microbiology | 3 |
| Agricultural Special Problems | 3 |
| Plant Breeding |  |
| Dairy Production and Management | 3 |
| Poultry Disease Prevention and | 3 |
| Sanitation | 3 |
| Animal Nutrition | 3 |
| Physiology of Reproduction | $3 / 4$ |
| Spectroscopic Methods in Chemistry | $3 / 4$ |
| Biochemical Analysis and | $3 / 4$ |
| Laboratory |  |
| Introduction to Analytical Chemistry | $3 / 4$ |
| and Laboratory |  |

Bachelor of Science Degree in Agricultural Sciences Concentration in Plant and Soil Science Suggested Four Year-Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | AGSC 2510 | 4 |
| AGSC 2010 | 3 | AGSC 2410 | 3 |
| MATH 1110 | 3 | COMM 2200 | 3 |
| Social/Behavioral | 3 | AGSC 1200 | 3 |
|  | 13 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010-2018 | 3 | Social /Behavioral Elective | 3 |
| CHEM 1110/BIOL 1110 | 3 | CHEM 1120/BIOL <br> 1120 | 3 |
| CHEM 1111/BIOL 1111 | 1 | CHEM 1121/BIOL <br> 1121 | 1 |
| Humanities Elective | 3 | AGSC 2200 | 4 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  |  | Humanities Elective | 3 |
|  | 13 |  | 17 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| CHEM 2110 | 3 | AGSC 3250 | 3 |
| AGSC 3200 | 4 | AGSC 3300 | 3 |
| AGSC 3210 | 3 | AGSC 3350 | 3 |
| AGSC 3240 | 3 | Guided Electives | 3 |
| AGSC 3340 | 3 | Guided Electives | 3 |
|  | 16 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AGSC 3260 | 4 | AGSC 4230 | 4 |
| AGSC 3320 | 3 | AGSC 4310 | 3 |
| AGSC 4220 | 4 | AGSC 4500 | 3 |
| AGSC 4710 | 1 | Guided Electives | 3 |
| AGSC 3120 | 3 | AGSC Elective | 3 |
|  | 15 |  | 16 |

Guided Electives*: Plant and Soil Science
AGSC 3200, 3210, 3220**, 3230**, 3240, 3250, 3260, 3300, 3320, 3330, 3340, 3350, 3550, 3560, 3570, 3580, 3590, 3600, 4210**, 4220**, 4230**, 4240, 4250, 4260, 4310, 4510, 4520, 4530, 4540, 4550, 4560, СН'ЕМ 3410 and 3411

## Guided Electives*

15 Credit Hours
*Guided Electives will be chosen from listed courses based upon the student's career interests.
**Students interested in soil science as a career will choose a minimum of 15 credit hours from the soils category of listed courses.

## Course Descriptions

Agricultural and Environmental Sciences (AGSC)
*AGSC 1200 Introduction to Plant Science (3). A one semester, introductory course in plant science that exposes students to the principles of crop science, horticulture, and conservation of the renewable natural resources. Two lectures and one laboratory period per week.
*AGSC 1410 Introduction to Animal Science (3). A course devoted to the adaptation of the different classes of farm livestock to varying farm conditions and to the relationship of each class to the other in different farm plans. A careful study of the correct types of livestock in relationship to economical production and market demands. Two lectures and one laboratory period per week.
*AGSC 2010 Introduction to Agribusiness I (3). The evolution of agriculture to agribusiness. Role, scope of agribusiness in the economy. Application of principles of economics to agriculture with focus on economic principles upon which rational managerial decisions must be made. Discussion of special topics as they affect small farmers, rural areas, environmental and natural resources, international trade and global economy.
AGSC 2020 Introduction of Agribusiness II (3). Principles of agribusiness management and management functions: planning, organizing, controlling, and directly. Agribusiness from characteristics out from structure. Marketing, forecasting, organization, basic capital budgeting, accounting information, budgeting, production, and inventory management, and human resource management.
AGSC 2040 Computer and Statistical Application in Agriculture (3). Computer concepts and basics of use of computer for decisionmaking. Emphasis on agricultural management concepts, management of data, and statistical analysis, use of popular software in agribusiness.
*AGSC 2200 Fundamentals of Soil Science (4). A study of the origin, structure, general nature of soil and the factors related to soil fertility, maintenance, and fertility practices. Three lectures and one laboratory period per week.

AGSC 2510 Fundamentals of Geospatial Information Systems (4). Introduction to GIS principles and technology. This course presents a foundation for creating, editing, querying, and presenting geospatial data. Laboratory exercises use a hands-on approach to learning GIS software and hardware. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.
AGSC 3000 Agricultural Marketing (3). An understanding of the operations of food marketing (theory of marketing) and a familiarity with many of the descriptive and factual aspects of food marketing. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3010 Farm Management (3). Organization planning and operating farm business to make the most effective use of available resources and procedures for making economic decisions. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 3020 Food Economics (3). An examination of the food prices and their effect on the consumers' and farmers' budgets. Food price determination and the marketing channels. International trade and development. Prerequisite: AGSC 2010 or instructor's approval.
AGSC 3030 Natural Resource Economics (3). A Study of the physical, economic and institutional factors affecting land and water use; population and resource requirements; principles of land utilization; social control of land, property, and land tenure. Prerequisite: AGSC 2010 or instructor's approval.
AGSC 3040 Agricultural Policy (3). A study of problems in agriculture, governmental policies, and programs assigned to deal with them.

AGSC 3050 Fundamentals of Agricultural Extension Education (3). The course is designed to introduce individuals to the intracurricular programs associated with formal, informal, and non-formal programs of agricultural education. School-based program components such as the classroom, the school lab, Supervised Agricultural Experience (SAE) programs, FFA, and school and community relationships will guide much of the discussion in this course. Non-formal education components such as $4-\mathrm{H}$ and adult models of AEE (i.e. Young Farmers) will also be studied. Subject matter will also explore the philosophical foundations and historical development of school-based and non-formal Agricultural Education in the United States as well as emerging trends.
AGSC 3060 Intra-Curricular and Related Activities in Agricultural Education (3). The course is designed to prepare individuals for teaching responsibilities associated with curriculum and program planning in 1) school-based agricultural education (i.e. high school and/or middle school) and 2) non-formal agricultural education (extension/4-H). Topics to be covered include program organization and content identification, preparation of instructional objectives, guidelines for the selection and development of instructional materials, adult education programs, classroom management, as well as youth leadership development (FFA/4-H) and experiential learning (SAE).

AGSC 3070 Agricultural Power Equipment (3). Teaching procedures that foster creativity, engagement, critical thinking, leadership development, classroom/laboratory management, and technical competency in agriculture will be taught and modeled through a variety of instructional strategies. Course is taught fall semester of residency/student teaching year. 3 hours.
AGSC 3080 Methods of Teaching Agri/Env/STEM (3). Planning, implementing and evaluating educational programs of agricultural/environmental sciences and engineering (including high school Agriscience courses offered for science credit); course and lesson planning; laboratory facilities and equipment; and instructional methods and techniques for agriscience and ag engineering. Course is taught fall semester of residency/student teaching year for agricultural education students. 3 hours.
AGSC 3090 Introduction to Agricultural Engineering (3). Developing agricultural mechanics programs, application of methods, practices, and skills; study of shop layouts; equipment, organization, and laboratory exercises. This course will provide pre-service agriculture teachers with the necessary skills to teach, manage, and maintain middle and/or high school agricultural mechanics education laboratories. The majority of the experience will focus teaching the agricultural mechanics skills of wiring/electricity, small engines, and welding. Additionally, students will also be taught current and relevant skills related to technical and academic standards in the PST pathway. Supervised field experiences in junior and senior high schools required for teacher education students. Course is taught spring semester of residency/student teaching year for agricultural education students. 3 hours.
AGSC 3110 Principles and Methods of Biotechnology II (4). This course will be a continuation of AGSC 2600. It will be hands-on blending lectures and laboratory sessions which will include 1) detection of food borne pathogens, allergenic substances in foods and animal feeds, and antibody mediated assays; 2) transcriptional and genetic analyses to improve health and productivity of food animals, and rapid nucleic acid/immunoassay based techniques for the detection of pathogens in animal products; 3) plant-microbe interaction; and 4) instrumentation orientations for electron microscopy, flow Cytometery, X-Ray Diffractometery, and ICP-OES etc. Prerequisites: BIOL 101011011, BIOL 1110/1111, CHEM 1110/1111.
AGSC 3111 Introduction to Leadership: Practical Applications (Honors) (3). The course is designed to serve as an introduction to the development of leadership skills. It serves as an investigation of leadership theory when applied to specific contexts such as environmental science, agriculture, food, forestry, fuel, etc.. Students will develop their own definition of leadership as an inquiry investigation of personal strengths, communication concepts, critical thinking skills and dispositions, problem solving techniques, change management, and a philosophy of leadership. As an honors level course students will be challenged to prepare and delivery professional presentations and engage in the course content at a deeper level.
AGSC 3112 Introduction to Leadership: Practical Applications (3). The course is designed to serve as an introduction to the development of leadership skills. It serves as an investigation of leadership theory when applied to specific contexts such as environmental science, agriculture, food, forestry, fuel, etc.. Students will develop their own definition of leadership as an inquiry investigation of personal strengths, communication concepts, critical thinking skills and dispositions, problem solving techniques, change management, and a philosophy of leadership.

AGSC 3120 Introduction to Applied Statistics I (3). Basic concepts and principles of measurements, data collection, scientific investigation, and survey design. Topics include statistical measures of central tendency and dispersions, probabilities, normal and other distributions, tests of significance, regression and correlation, analysis of variance and index numbers. Prerequisite: Six hours of college math.

AGSC 3130 Sample Survey Theory and Techniques (3). A practical course in conducting, analyzing, and summarizing surveys; includes review of probability, distribution, and statistical measures; simple random sampling, stratified, systematic and cluster sampling, multiframe, objective measurement, and enumerative surveys; sampling and non-sampling errors. Questionnaire design and enumeration techniques are included. Prerequisite: AGSC 3120.

AGSC 3185 Cooperative Education (3). A university-wide program that combines academic study with meaningful work experiences directly related to the student's academic major.
AGSC 3200 General Agricultural Botany (4). A course designed to provide a broad understanding of the fundamental facts and principles of botanical science. Three lectures and one laboratory period per week. Prerequisite: AGSC 1200.
AGSC 3210 Principles of Crop Science (3). A general study of the distribution culture, use, and climatic adaptation of the major agronomic crop plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3220 Soil and Environmental Chemistry (3). A study of the chemical, mineralogical and colloidal properties of soils, with emphasis on mineral crystal structure and ion exchange phenomenon. Soil acidity, salt affected soils and their amelioration. Soil and water pollution and abatement principles and wet chemistry principles. Three lectures. Prerequisites: AGSC 2200, CHEM 1110 and 1120.

AGSC 3230 Soil Morphology and Classification (4). An introductory study of the principles of soil classification and land judging. Required of majors in Agronomy. Three lectures and one laboratory period per week. Prerequisites: AGSC 1200 and 2200.

AGSC 3240 Economic Entomology (3). A brief review of the structure, morphology, controls and the recognition of economic insects as related to agriculture. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.
AGSC 3250 Farm Weeds and Their Control (3). A course involving the identification, eradication, and economic value of the important weeds of fields and pastures. Elective for any department. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.
AGSC 3260 Plant Physiology (3). Application of plant physiological principles to seed plants with special emphasis on photosynthesis, respiration, absorption, transpiration and nutrition. Prerequisites: AGSC 1200 and 3200.

AGSC 3300 Plant Pathology (3). A study of the diseases of the most important agricultural plants in Tennessee and the south. Emphasis on the nature of the disease, recognition and control measures. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3320 Propagation of Horticultural Plants (3). A study of the methods of propagation of horticultural plants including seedage, cuttage, and grafting of both economic and ornamental plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3330 Floriculture (3). A course dealing with the principles underlying culture of greenhouse crops, commercial cut flowers, and house plants. Prerequisite: AGSC 1200.

AGSC 3340 Forestry (3). A study of forest conservation and management and the relation of forestry to agriculture, including the influence of the forest on climate, stream flow, and erosion. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 3350 Landscape Plants and Design (3). A study of the landscape composition dealing with the designing of small lots, city property, public grounds, and large estates. The use of ornamental plants such as trees, shrubs and flowers and their identification. Prerequisite: AGSC 1200.

AGSC 3400 Animal Breeding and Genetics (3). A study of the fundamental laws of heredity and their relation to livestock production. Identification and use of breed differences, breeding systems, gene frequencies, heritability and heterosis, pedigree information, and progeny testing for selection and mating of livestock are covered. Advances in livestock genetic evaluation techniques are also discussed.

AGSC 3410 Anatomy and Physiology of Domestic Animals (3). Review of the structure and function of body systems of domestic livestock. Relationships to animal management practices and animal health considerations emphasized. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3420 Feeds and Ration Formulation (3). A study of the basic principles of feeding farm animals, feeding standards, balanced rations, composition and nutritive value of feeds. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.
AGSC 3430 Animal Health and Disease Prevention (3). A study of the causes, symptoms, and treatment of general diseases and parasites of livestock and poultry with special emphasis on prevention of health
problems. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.
AGSC 3440 Swine Production and Management (3). A study of the breeding, management, feeding and marketing of swine. Emphasis placed on both purebred and commercial production. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.
AGSC 3450 Beef Production and Management (3). This course includes a study of history, development, and distribution of breeds; management practices of the various production systems; control of diseases and parasites; and feeding practices for commercial and purebred breeding herds. Two lectures and one laboratory period per week. Prerequisite: AGSC 1410.

AGSC 3500 Principle of Food Science and Technology (3). Techniques of procurement, processing, packing, preservation and distribution of foods are covered in this class. Mechanization and automation of food handling processes. Nutrient components and organoleptic properties of foods. Regulation of the food industry. Two lectures and one laboratory period per week.

AGSC 3510 Processing Milk and Milk Products (3). A study of the procurement, processing and sale of milk and the bacteriological, chemical, and physical aspects of market milk processing. Two lectures and one laboratory period per week. Prerequisites: CHEM 1110 and 1120.

AGSC 3520 Processing Poultry Products (3). A detailed study of grades and classes of market poultry and eggs; methods of processing, storage, preservation and problems in plant operations. Two lectures and one laboratory period per week. Prerequisite: AGSC 2410.

AGSC 3530 Food Microbiology (3). A study of the microorganisms associated with food products. Subjects include: classes of microorganisms, factors that influence growth of spoilage organism, food hazards and quality assurance, effects of preservation techniques on food-borne organisms, microbiology of preservation techniques on food-borne organisms, and microbiology of fermented food products. Two lectures and two laboratory periods per week. Prerequisite: BIOL 2400.

AGSC 3540 Laboratory Instrumentation (3). Introduction to procedures and techniques commonly utilized in analysis of biological materials. Includes spectroscopy, gas and column chromatography, electrophoresis, etc.

AGSC 3550 Global Positioning Systems (3). Introduction to the principles, technology, and effective use of Global Positioning Systems. This course will present a foundation of navigation and positioning principles, hands-on experience with GPS instrumentation, collection and processing of data, and integration with geospatial information systems. This course is multidisciplinary and is designed for students in any field of study. Prerequisite: AGSC 2040 or equivalent.

AGSC 3560 Spatial Analysis (3). Fundamental concepts and analytical procedures used to abstract and simplify complex systems using geospatial information systems. This course emphasizes geometric, coincidence, and adjacency models as applied to surface analysis, linear analysis, raster analysis, topological overlay, and contiguity analysis. Spatial modeling will be used to describe, simulate, predict, and resolve real-world problems, issues, and systems. Prerequisite: AGSC 2510.
AGSC 3570 Geospatial Metadata (3). Data make up the most expensive component of a GIS and account for billions of dollars of expenditures annually. Metadata is data about data. It documents critical information about the data and the procedures used to create and maintain the data. This course explains metadata and its components, and teaches GIS users the how and why of documenting their data. Methodology and standards will follow the Federal Geographic Data Committee's Content Standard for Digital Geospatial Metadata and will conform to the National Spatial Data Infrastructure. Prerequisite: AGSC 2510.

AGSC 3580 Introduction to GIS for Natural Resources (3). An introductory geospatial information systems course on spatial data development and analysis in the science and management of natural resources. Topics covered include basic data structure, data sources, data collection, data quality, geodesy and map projections, spatial and tabular data analysis, digital elevation data and terrain analyses, cartographic modeling, and cartographic layout. Laboratory exercises provide practical experiences that complement theory covered in lectures. Prerequisite: AGSC 2510.
AGSC 3590 Spatial Landscape Design and Analysis (3). Modern landscape design is a blend of science, art, and technology. Utilizing the spatial tools provided by a GIS brings a new level of visualization and analysis of the landscape environment to the designer. This course introduces students to the principles and concepts of landscape design and analysis, and introduces the tools (CAD, GPS, and GIS) needed for successful landscape development and management. Prerequisites: AGSC 2510, AGSC 3550.
AGSC 3600 Image Analysis and Remote Sensing (3). Satellite imagery and aerial photography are vital tools for GIS developers, analysts, and users. Students will first be introduced to the concepts and methods of imaging, remote sensing, and image analysis. The main focus of this course will then be the anipulation and analysis of images within a GIS. Prerequisites: AGSC 2510.

AGSC 3601 Companion Animal Management (3). This is a general companion animal course. Students will learn breeding and selection, health maintenance, nutrition, therapy, animal bonding and other management practices related to dogs, cats, rabbits, horses, birds and fish. Prerequisite: AGSC 1410.
AGSC 3690 Principles of Food Engineering and Processing (3). This course focuses on engineering principles relevant to food processing operations. The introductory material covers units and dimensions used in process calculations as well as physical properties of food materials that are important in mass and energy balances. Mass and energy balances are reviewed for different types of food processing operations: batch and continuous, steady/ and unsteady/state systems. The second half of the course examines transport phenomena: fluid flow, heat and mass transfer. Through lectures, tutorials and problem/solving exercises, students will learn to analyze food processing systems and use basic engineering design equations. Students will also be introduced to advanced food processing technologies. The course is designed for undergraduate students in Agricultural and Environmental Sciences in (Concentration Food Bioscience and Technology). Prerequisite: AGSC 3500, MATH 1110 \& CHEM 1110.

AGSC 4010 Rural Finance (3). An examination of the rural credit institutions and the role of credit in the development of economics, farmer and consumer organizations. Pre-requisite: AGSC 2010 or instructor's approval.

AGSC 4020 Introduction to Agribusiness Analysis (3). Application of theory to management problems encountered in agribusiness firms, application of quantitative tools to solve problems, economies of size, supply demand relationship, input-output analysis, benefit-cost analysis, and interregional competition. Prerequisite: AGSC 2010 or instructor's approval.
AGSC 4030 Practicum in Agribusiness (4). Approval of instructor. Supervised in-depth specialized practical experience in an agribusiness or working experience in a specialized public organization, agency; or solving problems in the organization and/or operation of agribusiness. Students select a practical problem and recommend solution(s) after analyzing the same. Designed to give students training in problem-solving in a real business environment. Prerequisite: AGSC 2010 or instructor's approval.

AGSC 4040 World Agriculture (3). A study of the role of agriculture in economic development. Survey of lesser developed countries with special emphasis on Africa.

AGSC 4070 Agricultural Special Problems (3). Supervised laboratory or field work research of a problem in agricultural sciences. Written project outline and reports of results required.
AGSC 4080 Experimental Design (3). A review of scientific investigation principles and statistical inference. Subjects include analysis of variance and co-variance, non-parametric and analysis, multiple comparison test and experimental designs. Designs cover all randomized block, balanced block, latin square, factorial, split plot, rectangular lattice and augmented. Greater emphasis placed on logic rather than on mathematics and computer.
AGSC 4090 Community Development (3). An analysis of the meaning, structure and function of community development with emphasis on the factors important in community change is carried out in this class.

AGSC 4100 Organization and Contemporary Issues Facing Agriculture Firms (3). An examination of the organization of agribusiness firms, types of business, advantage and disadvantages of each type, legal considerations, approaches to organizational structure, integration deciding where decisions should be made. Operating a business in a socially conscious environment, social, health, environmental, and global issues affecting agricultural firms and their impact on future of agribusiness. Prerequisite: AGSC 2010 or instructor's approval.
AGSC 4210 Soil Physics (3). A study of the physical properties of soils. Physical makeup, color, structure, thermal relationships, aeration, water movement phenomenon in soils and its relationship to soil nutrient movement/uptake. Three lectures. Prerequisites: AGSC 2200, MATH 1110 and 1120.
AGSC 4220 Advanced Soil Fertility (4). A study dealing with the determination of nutrient deficiencies in soils and plants in rapid methods, recommendations of corrective measures. Two lectures and one laboratory period per week. Prerequisites: AGSC 2200, CHEM 1110 and 1120.

AGSC 4230 Soil and Water Conservation and Management (4). A study of the principles of tillage, drainage, fertilization and rotation practices as they affect the productive capacity of field soils. Three lectures and one laboratory period per week. Prerequisites: AGSC 1200 and 2200.
AGSC 4240 Turf Management (3). This course will deal with establishing lawns, soil preparation, seeding, watering, fertilization, clipping, and general management. Corrective measures in established lawns. Care of golf course greens. Prerequisite: AGSC 1200.

AGSC 4250 Floral Design (3). A course dealing with essentials of flower arrangement. One lecture and two laboratory periods per week. Prerequisite: AGSC 1200.
AGSC 4260 Greenhouse Operation and Management (3). An elementary course of principles involving greenhouse site selection, types of structure, covering materials, heating and cooling systems and cultural practices for producing flowers and ornamental plants. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.

AGSC 4280 Food Safety and Quality Assurance (3). The course 4280 will cover the topics include regulation, safety, and wholesomeness of food products; microbiological, chemical, and physical risks associated with food; hazard analysis (HACCP) as related to food safety, processing and quality; sanitation and pest management principles; methods for analyzing the sensory qualities of food products; problem management associated with food quality assurance in food industries. Prerequisite: AGSC 3500.
AGSC 4310 Plant Breeding (3). Application of genetic principles to the improvement of economic crop plants; methods and procedures of plant breeding. Two lectures and one laboratory period per week. Prerequisite: AGSC 1200.
AGSC 4410 Dairy Production and Management (3). A study of general farm operation, adaptation of the herd to available facilities, factors affecting production, balancing rations for dairy cattle, disease control, principles of modern dairy cattle breeding, arrangement and development of dairy farm buildings. Two lectures and one laboratory period per week. Prerequisites: AGSC 1410 and 3420.
AGSC 4420 Poultry Disease Prevention and Sanitation (3). A course designed to give the major principles underlying sanitation and disease prevention as applied to a poultry farm. Two lectures and one laboratory period per week. Prerequisite: AGSC 2410.
AGSC 4430 Animal Nutrition (3). A study of nutrients: their classification, properties, and functions; their digestion, absorption and cellular metabolism; and their requirements and deficiency symptoms. Prerequisites: AGSC 1410 and 3420 and one semester of organic chemistry.
AGSC 4440 Physiology of Reproduction (3). Fundamental principles of the physiology of reproduction with primary emphasis on farm animals, anatomy of the male and female reproductive tracts; hormones, estrus cycle; fertility and sterility, and manipulation of the reproductive process are covered in this class. Prerequisite: AGSC 1410.

AGSC 4450 Science of Meat (3). The study of the composition, physical, chemical, and nutritional properties of meat and meat products. Biochemical alterations of meat during aging, curing, processing and storage. Prerequisite: AGSC 1410.

AGSC 4460 Food Chemistry (3). The study of the function of food. Subjects include: food constituents-proteins, lipids, carbohydrates, mineral and trace elements, vitamins, enzymes; Effects of processing, storage and preparation. Two lectures and one laboratory period per week. Prerequisites: CHEM 1110 and 1120.

AGSC 4500 Senior Project (3). A course required of all seniors majoring in Agricultural Sciences. A course designed to expose students to basic research skills. Students are required to plan and carry out research in the area of their concentration. They are to design project, select method of investigation, review relevant literature, gather and analyze data, draw conclusions based on the results obtained from data.

AGSC 4510 Geospatial Applications in Pest Management (3). Pests, diseases, and weeds have plagued mankind since the beginning of agriculture. Even with modem equipment and methodology, the impact of pests, diseases, and weeds can be devastating. GIS and
spatial analysis offer an essential set of tools for use in pest management. This course introduces students to the concepts of pest management and then presents the geospatial tools needed to effectively and efficiently design, implement, and refine a successful pest management program. Prerequisites: AGSC 2510, AGSC 3550.
AGSC 4520 Spatial Analysis in Biosecurity and Risk Assessment (3). GIS and GPS have become integral parts of hazard and disaster management. Biohazards can arise in many different forms everything from natural events to acts of terrorism. This course will teach students to identify, map, and analyze biohazards, to assess damage, to develop recovery and mitigation plans, and to accurately monitor and predict biohazard risks. Prerequisites: AGSC 2510, AGSC 3550, AGSC 3560.

AGSC 4530 Spatial Database Design and Management (3). The accuracy and usability of data determine the analysis, output, and cost of any geospatial information system. This course presents the principles and techniques of geodatabase design, editing, and management needed to obtain required functionality from a GIS. Prerequisite: AGSC 2510.
AGSC 4540 Geospatial Information Systems Application and Design (3). Concepts and procedures used to successfully assess needs, evaluate requirements, design, and implement geospatial information systems. Emphasis will be placed on the data and technology needed to produced desired information products, and on cost-benefit analysis and project proposal development. Prerequisite: AGSC 2510.

AGSC 4550 Temporal Analysis of Spatial Information (3). The analysis of events over time can reveal trends that are not detectable in a single 'snapshot' of data. The spread of pests and diseases during a specified period, for example, can allow GIS users to make accurate predictions about future spread and to recommend measures to limit or stop spread. This course will introduce students to the concepts and tools needed to analyze spatial data over time. Upon successful completion of the course, students will have the knowledge and skills needed for temporal analysis of historical data and predictive modeling. Prerequisites: AGSC 2510, AGSC 3560.

AGSC 4560 Practicum in GIS (3). The GIS practicum is designed to expose students to real-world GIS problems that might be encountered in the workplace. Student is assigned specific projects in which their knowledge and skills in GIS will be used to solve a problem. Prerequisites: AGSC 2510, AGSC 3560.
AGSC 4710-4720 Seminar (1-1). A course devoted to discussions of current literature and problems in agricultural sciences. Required of seniors majoring in the department. One hour credit each semester. One lecture.

## Department of Biological Sciences

Terrance L. Johnson, Ph.D., Department Chair 110 McCord Hall

(615) 963-5681

Faculty: M. Asson-Batres. C. Caudle, A. Ejiofor, H. Fentress, P. Ganter, C. Gardner-Jones, L. Harlston, D. Hui, A. Isa, M. Ivy, G. Komives, E. Martin, B. McAdory, E. Myles, Q. Quick, J. Robinson, V. Tiriveedhi, B. Washington, X. Wang, A. YoungSeigler

General Statement: The curriculum of the Department of Biological Sciences is designed to fulfill the pre-professional requirements of degrees leading to careers in medical, dental,
environmental, marine, and biological sciences. Training in biology prepares students for careers in teaching, government, and private industry. State and federal agencies in agriculture, health, human services, environmental protection, and similar areas seek out students with good backgrounds in biology. New areas of biotechnology and genetic engineering have been added to opportunities in more traditional fields of research in marine biology, limnology, pharmacy, medicine, pathology, forestry, and horticulture. The degree programs in biology can provide a liberal education directed toward an appreciation of the complexity, diversity and beauty of nature.
The Department also offers the M.S. degree in Biology and the Ph.D. degree in Biological Science. For information about these programs, see the Graduate Catalog.

## General Education Core:

Communications (9 hours)

| ENGL 1010, 1020 | Freshman English I, II (minimum 6 <br> grade of C in each)  |  |
| :--- | :--- | :--- |
| COMM 2200 | Public Speaking | 3 |

Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course I 3
ENGL 2110-2230 Sophomore Literature Course II 3
Humanities One course from approved list. 3
Social and Behavioral Science (6 hours)
Elective One course from approved list.
Elective One course from approved list.
History (6 hours)
HIST 2010 American History I
HIST 2020 American History II 3
Natural Science (8 hours)
BIOL 1110/1111
General Biology I
4
BIOL 1120/1121
General Biology II
4
Mathematics (3 hours)
One course from approved list.

Orientation (1 hour)
UNIV 1000 Service to Learning 1
Total General Education Hours with Orientation: 42-Hours
Major Core: 32 - Hours
Mathematics (3 hours)
MATH 1730 or Pre-Calculus Mathematics II or Pre- 3 $1720 \quad$ Calculus Mathematics Alternative or
MATH $1915 \quad$ Calculus and Analytical Geometry
(required for Cellular and Molecular Biology students)

Note: Students may need to pass MATH 1710 or lower math if they are unprepared for MATH 1720 or 1915.
Chemistry (16 hours)
CHEM $1110 \quad 1111$ General Chemistry I with lab 4
CHEM $1120 \quad 4$
CHEM 20102011 Organic Chemistry I with lab 4
CHEM 20202021 Organic Chemistry II with lab 4
Physics (8 hours)
PHYS 20102011 College Physics I with lab
PHYS $2020 \quad 2021$ College Physics II with lab
Biology (8 hours)
BIOL 21102111 Cell Biology with lab
BIOL 21202121 Principles of Genetics with lab 4
Total Major Core: 32

For Admission into the upper division of programs of the Biology major, students must complete all of the requirements listed above under General Education Core and the Major Core. In addition they must earned a cumulative grade point average of at least 2.0 on college-level coursework.

## Upper-division Curricula

The undergraduate curricula for majors results in the Bachelor of Science degree. Students may select one of three curricula under the guidance of a major advisor. The programs are:1)General Biology, which is recommended for preprofessional students; 2) Cellular and Molecular Biology, which is recommended for students who wish to pursue graduate training and/or careers in these fields; and 3)Teacher Certification in Biological Sciences, which leads to endorsement in biology and general science for teaching grades $7-12$. No grade of less than " $C$ " in any Biology course will be accepted as credit toward meeting Departmental requirements.

The Teacher Education Program is designed for students pursuing a teaching career in secondary education with a major in Biology. The program goals are directed toward the application of biology to the development of competencies in reading, writing, speaking, listening, mathematics, reasoning, studying, and computer competency. The overall curriculum provides for the improvement of knowledge and skills in English, the arts, mathematics, natural sciences, and social studies. A total of 124 semester hours is required in the teacher preparation program including student teaching and the accompanying seminar. Enhanced student teaching requires an eight-week placement in secondary school and a seven-week placement in middle school. A foreign language is not a requirement for the teacher education curriculum.

Students seeking teacher certification in Biology must be officially admitted to the certification program by applying through the College of Education, usually in the sophomore year. Admission to this program requires a cumulative grade point average of 2.75 and a passing score on the PreProfessional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. To be eligible for upper-level certification courses, a student must be officially admitted to the Teacher Education Program. For a complete list of admission and retention requirements in the Program, see the College of Education section, Teacher education Admission and Requirements.

A major in Biology with emphasis in General Biology or Cellular and Molecular Biology requires 122 semester hours, of which 33 must be in biological course work. Seniors who have demonstrated high achievements in their major courses are encouraged to take Biology 4190, an honors research course. This course offers an opportunity to gain experience in research under the direction of the Departmental faculty.

An undergraduate minor in the Department consists of a minimum of 24 semester hours, 16 of which should be taken in sequence in Biology 1110-1111; 1120-1121; 2110-2111 (Cell Biology), and 2120-2121 (Genetics). General Chemistry 1110 and 1120, with laboratories, are required as a supporting related course and must precede BIOL 2110. The remaining eight hours of the minor must be on the 3000 or 4000 level and may be elected in the minor area desired by the student.

Accreditation: The teacher certification program in Biology is approved by the Tennessee Department of Education. In addition, the teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

Bachelor of Science Degree in Biology General Biology Emphasis<br>Suggested Four-Year Plan - Total 122-Hours

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BIOL 1110, 1111 | 4 | BIOL 1120, 1121 | 4 |
| CHEM 1110, 1111 | 4 | CHEM 1120, 1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Social Science (Elective) | 3 | *MATH 1720 or Higher | 3 |
| UNIV 1000 | 1 | Social Science (Elective) | 3 |
|  | 15 |  | 17 |

*Students will have to take MATH 1710 or lower if they are unprepared for these courses.

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BIOL 2110, 2111 | 4 | BIOL 2120, 2121 | 4 |
| CHEM 2010, 2011 | 4 | CHEM 2020, 2021 | 4 |
| ENGL 2110 | 3 | ENGL 2120 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| COMM 2200 | 3 | Humanities | 3 |
|  | 17 |  | 17 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR, |
| Physiology Elective | 4 | BIOL 4120, 4121 | 4 |
| $\begin{aligned} & \text { (BIOL 3210/3211, } \\ & 3400 / 3401,4300 \end{aligned}$ |  | CHEM 3410, 3411 | 4 |
| /4301) |  |  |  |
| BIOL Elective | 4 | PHYS 2020, 2021 | 4 |
| 3000/4000 |  |  |  |
| $\begin{aligned} & \text { PHYS 2010, } 2011 \\ & \text { BIOL } 3110 \text { or AGSC } \\ & 3120 \text { or } 3130 \end{aligned}$ | 4 | Electives, 3000/4000 | 3 |
|  | 3 |  |  |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BIOL 4170 | 1 | BIOL 4180 | 1 |
| BIOL Electives | 4 | BIOL Electives | 8 |
| 3000/4000 |  | 3000/4000 |  |
| Electives 3000/4000 <br> Level | 9 | Electives 3000/4000 | 3 |
|  | 14 |  | 12 |
| Bachelor of Science Degree in Biology Cellular and Molecular Biology Emphasis |  |  |  |
| Suggested Four-Year Plan - Total 122-Hours |  |  |  |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BIOL 1110, 1111 | 4 | BIOL 1120, 1121 | 4 |
| CHEM 1110, 1111 | 4 | CHEM 1120, 1121 | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Social Science (Elective) | 3 | MATH 1910* |  |
| ASOR 1001 | 1 | Social Science (Elective) | 3 |
|  | 15 |  | 17 |

*Students will have to take MATH 1710 and 1720 if they are unprepared for 1915.

FALL SEMESTER
BIOL 2110, 2111
CHEM 2010, 2011
SOPHOMORE YEAR

Sophomore Lit.
HIST 2010
COMM 2200

| HR. | SPRING SEMESTER | HR. |
| :---: | :--- | :---: |
| 4 | BIOL 2120, 2121 | 4 |
| 4 | CHEM 2020, 2021 | 4 |
| 3 | Humanities | 3 |
| 3 | HIST 2020 | 3 |
| 3 | Humanities | 3 |
| 17 |  | 17 |



## Course Descriptions <br> Biology (BIOL)

For all classes that have laboratory components, students must register for the laboratory in the same semester that they register for the lecture class.
BIOL 1010, 1011 and 1020, 1021 Introductory Biology I, II and Laboratory (4, 4) (Formerly BIO 1010, 1011 and 1020, 1021). An interdisciplinary course for non-science majors involving the principles of mathematics, chemistry, physics and biology. The objective of the course is to integrate the areas as they are related to living organisms. Three hours lecture and two hours laboratory per week.

BIOL 1012, 1013 and 1022, 1023 Honors Introductory Biology I, II and Laboratory (4, 4) (Formerly BIO 1012, 1013 and 1022, 1023). Honors version of BIOL 1010, 1011, 1020, 1021. Courses limited to students in University Honors Program.
BIOL 1110, 1111 and 1120, 1121 General Biology I, II and Laboratory $(4,4)$ (Formerly BIO 1110, 1111 and 1120, 1121). A general biology course for science majors that covers structure, function, and life characteristics of organisms. The objective of the course is to provide students a survey of living organisms and the processes required for life.

BIOL 1112, 1113 and 1122, 1123 Honors General Biology I, II and Laboratory (4, 4) (Formerly BIO 1032, 1033 and 1042, 1043). Honors version of BIOL 1110, 1111, 1120, 1121. Course limited to students in University Honors Program.

BIOL 2110, 2111 Cell Biology and Laboratory (4) (Formerly BIO 211, 211L). Structure and function of cells and their components. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 2120, 2121 Principles of Genetics and Laboratory (4) (Formerly BIO 212, 212L). An introduction to genetics, including classical and modern approaches, the laws of heredity, the role of heredity in developmental physiology, and the relation between heredity and evolution. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 2210, 2211 and 2220, 2221 Human Anatomy and Physiology and Laboratory (4, 4) (Formerly BIO 221, 221L and 222, 222L). The fundamentals of the structure, function, and organization of the organ systems of man. These courses should be taken in sequence.
BIOL 2400, 2401 Principles of Microbiology (4). Identification, culture, sterilization, and disinfectant procedures employed in studying certain microorganisms. Open to majors in Family and Consumer Sciences, HPER, and Nursing.
BIOL 3010, 3011 Earth and Space Science and Laboratory (3) (Formerly BIO 301, 301L). An integrated study of earth and space sciences, including a study of the shape, structure, composition, motions, and atmosphere of the earth. Topics include an examination of the effect of weathering and erosion on the lithosphere and concerns for our environment. Consideration will be given to space exploration, including stars, space, and time. Two lecture periods and one two-hour laboratory per week.
BIOL 3110 Biometrics (3) (Formerly BIO 311). An introduction to the methods of statistics that are of particular interest to biologists for experimental design and interpretation. Prerequisites: MATH 1720, BIOL 2110, 2111, 2120, 2121, or their equivalents.
BIOL 3200, 3201 Comparative Physiology (4) (Formerly BIO 320, 320L). Introduces the concepts of physiology, including topics from cellular and animal physiology. Prerequisites: Successful completion of BIOL 2120, 2121; CHEM 211-211L and/or concurrent enrollment in CHEM 212-212L and PHY 212-212L.

BIOL 3210, 3211 Mammalian Physiology and Laboratory (4) (Formerly BIO 321, 321L). Consideration of the dynamic interactions and integrations of mammalian organ systems. Special emphasis is placed upon recent advances in methodology and new concepts in physiology and contributing sciences. Prerequisites: BIOL 1110, 1111, 1120, 1121 and CHEM 1110, 1111, 1120, 1121, or equivalents.
BIOL 3240, 3241 Comparative Anatomy and Laboratory (4) (Formerly 324, 324L). The comparative anatomy and evolution of the organ system of chordate animals. Prerequisites: BIOL 1110, 1111, 1120, 1121.

BIOL 3300, 3301 Plant Morphology and Laboratory (4) (Formerly BIO 330, 330L). Consideration of the structure, embryology, and phylogeny of higher vascular plants. Prerequisites: BIOL 1110, 1111, 1120, 1121, BIOL 2120, 2121, 4110, 4111.

BIOL 3320, 3321 General Botany and Laboratory (4) (Formerly BIO 332, 332L). The anatomy, physiology, and taxonomy of plants. Prerequisites: BIOL 2110, $2111,2120,2121$.

BIOL 3400, 3401 Introduction to Microbial Physiology and Laboratory (4) (Formerly BIO 340, 340L). Salient features in the physiology of microorganisms. Selected examples of the metabolism of carbohydrates, lipids, and nitrogen-containing compounds are considered as a basis for further understanding of biologic phenomena. Prerequisites: BIOL 3410, 3411 or CHEM 211, 211L concurrently.

BIOL 3410, 3411 Principles of General Bacteriology and Laboratory (4) (Formerly BIO 341, 341L). The isolation, identification, culture, nutrition, sterilization, and chemotherapeutic procedures employed in studying bacteria. Prerequisites: BIOL 2110, 2111, 2120, 2121; CHEM 1110, 1111, 1120, 1121.

BIOL 3710 Methods of Teaching Biology (3) (Formerly BIO 371). A course designed to explore methods and techniques for teaching biology in the secondary school. It offers opportunities for locating sources of biological materials, supplies, and equipment for the biology laboratory and gives guidance in the selection of books, journals, and other printed materials that support academic programs in secondary school biology. A field component of at least 24 hours of varied clinical experiences, classroom observation, active participation, and other related activities in clinical and/or in school settings is required. Required of all Biology majors seeking secondary certification in Biology. Prerequisite: official admission to the Teacher Education Program.
BIOL 4100 Special Topics (3) (Formerly BIO 410). Student-and faculty-generated course. Scope of subject matter is determined by students and instructor. Prerequisites: 12 hours upper-level Biology or permission of instructor. (Elective)
BIOL 4110, 4111 Molecular Genetics and Laboratory (4) (Formerly BIO 411, 411L). An introduction to molecular genetics in microorganisms, plants, and animals. Emphasis is placed on biotechnical advances and the methods and techniques used in these systems. Prerequisites: BIO 2110, 2111, 2120, 2121.

BIOL 4112, 4113 Bioinformatics (4) upon successful completion of this course, student will be able to (1) retrieve specific DNA and protein sequence, (2) identify experimental sequences through GenBank database similarity search, (3) extract functional information for DNA and protein sequences from public database, (4) perform multiple sequences alignment and phylogenetic analysis, (5) describe to a reasonable accuracy the theoretical bases for these operations, (6) write scripts to perform computational functions.

BIOL 4120, 4121 Principles of Ecology and Laboratory (4) (Formerly BIO 412, 412L). Fundamental ecological principles with special reference to levels of organization, population and community properties, structural adaptation, functional adjustments, and other factors affecting the distribution of organisms. Prerequisite: BIOL 1110, 1111, 1120, 1121, 2120, 2121, 4110, 4111.
BIOL 4130, 4140 Contemporary Problems in Ecology I, II (3, 3) (Formerly BIO 413, 414). A study of some of the contemporary problems constituting the environmental crisis, the hazards comprising such problems, and the complexity affecting their resolutions. (Elective)

BIOL 4150, 4151 Microtechnique and Laboratory (4) (Formerly BIO 415, 415L). Methods of microscopic study of tissues. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121 and CHEM 1110, 1111, 1120, 1121.

BIOL 4160 Evolution (3) (Formerly BIO 416). A study of current evolutionary theory, including systematics, with an examination of macroevolutionary patterns and microevolutionary processes. Prerequisites: BIOL 1110, 1111, 1120, 1121.
BIOL 4170 and 4180 Senior Seminar (1, 1) (Formerly BIO 417, 418). Current problems in biology. A minimum of one semester required of all seniors in the Department. Meets one hour per week.

BIOL 4190 Junior Honors Research (3) (Formerly BIO 419). Open to juniors and seniors of outstanding attainment who have demonstrated high achievements in their major field. It offers opportunity to do individual research under the direction of a member of the Department faculty. (Elective)
BIOL 4200, 4201 Invertebrate Zoology and Laboratory (4) (Formerly 420, 420L). Study of the morphology, physiology, taxonomy, and life histories of the invertebrates. Emphasis is placed on the systemic developments of invertebrate types. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)

BIOL 4210, 4211 Embryology and Laboratory (4) (Formerly BIO 421, 421L). A general consideration of gametogenesis, fertilization, cleavage in animals and the early development of echinoderms, protochordates, and selected vertebrates, with emphasis on early development of the chick. Prerequisite: BIOL 3240 and 3241 are strongly recommended.
BIOL 4220, 4221 Endocrinology and Laboratory (4) (Formerly BIO 422, 422L). The function of vertebrate hormones, with emphasis on those concerned in the physiology of reproduction. Topics include techniques used in small animal surgery in endocrine research. Prerequisite: BIOL 4210, 4211. (Elective)

BIOL 4230, 4231 Histology and Laboratory (4) (Formerly BIO 423, 423L). Study of animal tissues. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121, 4110, and 4111. (Elective)
BIOL 4240, 4241 Introduction to Parasitology and Laboratory (4) (Formerly BIO 424, 424L). Animal parasites and their methods of entering the body of man and mammals. The several types of hostparasite relationships are surveyed, with emphasis on the effects of parasites on or within the hosts, immunogenic responses by the host to parasitism, and a history of the discipline. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)
BIOL 4260, 4261 Field Zoology and Laboratory (4) (Formerly BIO 426, 426L). Study of selected groups of animals. Methods of collecting, classifying, and preserving will be emphasized. Prerequisites: BIOL 1110, 1111, 1120, 1121, 2120, 2121. (Elective)
BIOL 4270, 4271 and 4280, 4281 Physiology and Pathophysiology I, II and Laboratory (4, 4) (Formerly BIO 427, 427L and 428, 428L). A closely integrated series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Physiology of the nervous system, blood circulation, respiration, and special senses is considered, as is the basic and applied physiology of the digestive, excretory, and endocrine systems. Mechanisms of integrating various systems are emphasized. Must be taken in sequence. Prerequisites: BIOL 1110, 1111, 1120, 1121 or BIOL 2210, 2211, 2220 and 2221 and CHEM 211, 211L.
BIOL 4272, 4273 Physiology and Pathophysiology and Laboratory (4) (Formerly BIO 427A, 427K). An accelerated one-semester series of lectures and laboratory demonstrations which emphasize human physiology and pathophysiology. Immune response, gastrointestinal, cardiovascular, electrolytic, respiratory, renal, neurological, endocrinal, reproductive, and musculoskeletal disorders are considered. Both courses are required of Nursing majors. Prerequisites: BIOL 1110, 1111, 1120, 1121 or BIOL 2210, 2211, 2220 and 2221 and CHEM 1110, 1111.

BIOL 4300, 4301 Introduction to Plant Physiology and Laboratory (4) (Formerly BIO 430, 430L). Consideration of the functions of digestion, nutrition, growth, photosynthesis, respiration, translocation, photoperiodism, plant hormones, transpiration, and water relations as occurring in typical green plants. Prerequisites: BIOL 3320, 3321 and CHEM 1110, 1111, 1120, 1121.
BIOL 4320, 4321 Field Botany and Laboratory (4) (Formerly BIO 432, 432L). A course designed to acquaint the student with basic principles of plant classification and identification, the use of manuals with reference made to the families, genera, and species of the local flora. Prerequisite: BIOL 3320, 3321. (Elective)
BIOL 4400, 4401 Pathogenic Microorganisms and Laboratory (4) (Formerly BIO 440, 440L). Survey of the important features of hostparasite interaction. Characteristics of the organisms, host hypersensitivity, and natural and acquired immunity are considered as contributing factors toward this interaction. Modern preventive methods are emphasized. Prerequisite: BIOL 3410, 3411.
BIOL 4410, 4411 Immunology and Serology and Laboratory (4) (Formerly BIO 441, 441L). Theories of immunity and training in serological methods and procedures for immunization. Prerequisites: BIOL 3410, 3411. (Elective)
BIOL 4420, 4421 Virology and Laboratory (4) (Formerly BIO 442, 442 L ). Survey of bacterial, plant, and animal viruses with emphasis on their infectious cycles. Prerequisite: BIOL 3410, 3411. (Elective)
BIOL 4724 Student Teaching (9) (Formerly BIO 427S). A semesterlong experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of biology. Prerequisite: successful completion of all certification courses except EDCI 470A, which is taken concurrently.

## MARC Program

The following courses are offered through the MARC (Minority Access to Research Careers) Honors Program. Enrollment is restricted to MARC participants, or by permission of the Director.
BIOL 3920 Scientific Communication (4) (Formerly BIO 392). Course designed to improve written, oral, and quantitative skills necessary to enhance career development in the sciences.
BIOL 4900, 4901 Cell Physiology and Laboratory (4) (Formerly BIO 490, 490L). Introduction to the interrelationships of biological, physical, and chemical aspects of the cell. Prerequisites: BIOL 1110, 1111, 1120, 1121, CHEM 1110, 1111, 1120, 1121.
BIOL 4911 Modern Scientific Methods (3) (Formerly BIO 491). Use and applications of modern laboratory equipment and techniques. Prerequisite: BIOL 4900, 4901.

BIOL 4920 Honors Undergraduate Research (4) (Formerly BIO 492). Intramural and extramural biomedical research experiences.
BIOL 4930 Current Biomedical Topics (0) (Formerly BIO 493). Training in critical analysis and oral presentations of current journal publications in selected biomedical fields. Ethical issues including plagiarism, falsification, fabrication, and misconduct in research are discussed. All MARC Trainees must register in this course each semester.
BIOL 4940, 4950 MARC Seminar Series (1-1\&2) (Formerly 494, 495). Exposure to current presentations by eminent scientists in biomedical research.

## Department of Chemistry

## Mohammad R. Karim, Ph.D., Department Chair 201 Chemistry Building <br> (615) 963-5321

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General Statement: The purpose of the Department of Chemistry is the advancement, interpretation, dissemination, and preservation of chemical concepts and knowledge. Chemistry itself is the science of the nature, composition, and property of material substances, as well as their transformations and interactions. It is thus basic to natural phenomena and modern technology alike. Chemistry is traditionally divided into five major parts: organic chemistry, inorganic chemistry, analytical chemistry, biochemistry, and physical chemistry.

The principal objectives of the Department of Chemistry are (l) to instruct students in the basic principles and techniques of the various branches of chemistry, (2) to educate students and the general public in the importance of chemistry to the quality of the environment and everyday living, and (3) to engage in research and publication of new scientific information.

The Chemistry Department offers undergraduate programs earning B.S. degrees and a graduate program earning an M.S. degree. Four different undergraduate curricula are available to students according to their individual interests. For details of the M.S. in Chemistry, see the Graduate Catalog.
No grade of less than a " $C$ " in any Chemistry course will be accepted as credit toward meeting Departmental requirements and towards graduation.

Accreditation: The teacher certification program in Chemistry is approved by the Tennessee Department of Education. In addition, the teacher certification program of the University is accredited by the National Council on the Accreditation of Teacher Education (NCATE). Curriculum 1-Professional Chemistry Curriculum is approved by the American Chemical Society.

Departmental Requirements for Bachelor of Science Chemistry:

Requirements for a Minor: 24 or More Semester Hours with a Minimum 8 Hours of Upper-Division Courses
An undergraduate minor in chemistry must take a minimum of 24 hours of chemistry courses, 16 of which to be taken in sequence. These are CHEM 1110, 1111 (General Chemistry I and Lab), CHEM 1120, 1121 (General Chemistry II and Lab), CHEM 2010, 2011 (Organic Chemistry I and Lab), and CHEM 2020, 2021 (Organic Chemistry II and Lab). Honors sections of these courses will also satisfy the requirement. The remaining 8 hours of the minor must be on the 3000 or 4000 level in consultation with the advisor.
General Education Core
Communications (9 hours)
ENGL 1010, $1020 \quad$ Freshman English I, II 6
(minimum grade of $C$ in each)
COMM 2200 Public Speaking

3
Humanities and/or Fine Arts (9 hours)
ENGL 2012-2320 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3

Social and Behavioral Science (6 hours)
Elective One course from approved list. 3
Elective One course from approved list. 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
CHEM 1110, $1111 \quad$ General Chemistry I 4
CHEM 1120, $1121 \quad$ General Chemistry II 4
MATH 1910 (4-hours)
(Students will need lower level math if they are unprepared for 1910.)

Orientation (1 hour)
UNIV 1000 Orientation for Science Majors 1
Total General Education Hours with Orientation - 43-Hours

## Upper-division Admission

For admission into the upper-division programs of the Chemistry major, students must complete all of the requirements listed above under General Education Core. In addition, they must have earned a cumulative grade point average of at least 2.0 on college-level coursework, and completed the Senior Exit Examination. In addition, they must have earned a grade of C or better in CHEM 1110 or 1112, 1111 or 1113,1120 or 1122,1121 or $1123,2100,2101,2010$ or 2012, 2011 or 2013, 2020 or 2022, and 2021,or 2023. Honors sections of chemistry courses will also fulfill the degree requirements. Chemistry Majors are recommended to take honors courses.
Curriculum 1 - ACS Approved Professional Chemistry
Curriculum: 59- Hours
This program requires 120 hours for graduation and is designed for students pursuing professional chemists' career opportunities in industry or government laboratories, and for those students desiring to pursue advanced studies in graduate school.
A minimum of 59 semester hours in Chemistry is required, 39 of which must be in 3000- or 4000-level courses. The required courses are 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3210, 3211, 3220, 3221, 3410, 3420, 4100, 4200, 4201, 4210, 4320, 4321, 4505, 4506, 4910, and 4920, plus two additional courses to be chosen from CHEM 4005-9, 4600, 4500, 4800 and 4830. CHEM 4600 is strongly recommended. MATH 2110 is also highly recommended during the sophomore year. This curriculum is based upon
recommendations by the American Chemical Society. Honors sections of chemistry courses will also fulfill the degree requirements. Chemistry Majors are recommended to take honors courses.
Curriculum 2 - Biochemistry Concentration: 50-Hours
This program requires 120 hours for graduation and is designed for students pursuing a professional career in medicine, dentistry, pharmacy, or veterinary medicine. Students following this curriculum may receive a minor in Biology, if students take an additional 8 hrs. of 3000 or 4000 level biology courses.
A minimum of 50 semester hours in Chemistry is required, 30 of which must be in 3000- and 4000-level courses. The required courses are: 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3000, 3210, 3211, 3220, 3410, 3411, 3420, 3421, 4100, 4505, 4506, 4700, 4701, 4910, and 4920. Honors sections of chemistry courses will also fulfill the degree requirements. Chemistry Majors are recommended to take honors courses.

## Curriculum 3 - Chemistry Concentration: 35-Hours

This program of study requires 120 hours for graduation and is designed to train students for career objectives other than professional chemist, graduate school, professional school, or teacher certification. This program gives students more flexibility with regard to individualized course selection which prepares students for careers as laboratory technicians, research technicians, or positions in chemical sales, process control, chemical editing-writing, and patent law. The minor in this concentration is selected by the student according to his or her career goals and is monitored carefully by an advisor.

This degree requires 35 hours of Chemistry with 15 hours of 3000- and 4000-level courses, and is designed for students whose career objectives are in fields where chemistry has indirect applications. The required courses are: 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3000, 3210, 3211, 3220, 3221, 4100, 4910, and 4920.
Curriculum 4 - Major in Chemistry with Teacher: 34-Hours Certification, Licensure for Grades 7-12
All candidates for certification in secondary education must complete a minimum of 123 semester hours, which includes a general education core (42 hours), a professional education core ( 36 hours, including a 9 -hour course in enhanced student teaching), and a major concentration of content and knowledge courses ( 32 hours). The required courses in Chemistry are 1110, 1111, 1120, 1121, 2100, 2101, 2010, 2011, 2020, 2021, 3000, 3210, 3211, 3410, 3710, 4724 and 4910. Successful completion of this program provides one with a license to teach Chemistry in grades 7-12 in Tennessee public schools.
Students seeking the Bachelor of Science Degree with licensure must make written application for admission to the Teacher Education Program in the College of Education, usually during the sophomore year. They must have a 2.75 cumulative quality point average at time of application and must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematical portions of the SAT are exempt from the PPST and the CBT. Enhanced student teaching requires placement of eight weeks at the secondary level and seven weeks at the middle school level. For a complete list of requirements for admission to and retention in the Teacher Education Program, see the College of Education section.

Bachelor of Science Degree in Chemistry Curriculum 1 - Professional Chemistry Suggested Four-Year Plan

## FRESHMAN YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| CHEM 1112, $1113^{* *}$ | 4 | CHEM 1122, 1123** | 4 |

ENGL 1010

| 3 | ENGL 1020 | 3 |
| :---: | :--- | :---: |
| 4 | MATH 1920 | 4 |
| 3 | SOC/BEH SCI | 3 |
| 1 | COMM 2200 | 3 |
| 3 |  |  |
| 18 |  | 17 |

SOP*Students will have to begin with lower-level MATH if they are unprepared for this course.
**Honors courses are strongly suggested


Bachelor of Science Degree in Chemistry Curriculum 2 - Professional Biochemistry Concentration Suggested Four-Year Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| CHEM 1112, 1113** | 4 | CHEM 1122, 1123** | 4 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| BIOL 1110, 1111 | 4 | BIOL 1120, 1121 | 4 |
| MATH 1910* |  | COMM 2200 | 3 |
| UNIV 1000 | $\frac{1}{}$ |  | 14 |

*Students will have to begin with lower-level MATH if they are unprepared for this course.

## SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| CHEM 2100, 2101 | 4 | CHEM 2022, 2023** | 4 |
| CHEM 2012, 2013** | 4 | Humanities | 3 |
| SOC/BEH SCI | 3 | HIST 2020 | 3 |
| ENGL 2012-2320 | 3 | Humanities | 3 |
| HIST 2010 | 3 | SOC/BEH SCI | 3 |
|  | 17 |  |  |
|  | JUNIOR YEAR |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| CHEM 3210, 3211 | 4 | CHEM 3220 | 3 |
| CHEM 3410, 3411 | 4 | CHEM 3420, 3421 | 4 |
| PHYS 2010, 2011 | 4 | PHYS 2020, 2021 | 4 |
|  |  | CHEM 4100 | 2 |



CHEM 1112 (3) and 1113 (1) Honors General Chemistry I and Laboratory (Formerly CHEM 1012 and 121K). For Chemistry majors and University Honors Program students only. Topics covered are similar to CHEM 1110, 1111, but the depth of understanding expected is greater. Prerequisites: high school chemistry or CHEM 1000, 1001, and two years high school algebra or MATH 1110. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 1120 (3) and 1121 (1) General Chemistry II and Laboratory (Formerly CHEM 1020 and 1021). A continuation of CHEM 1110, 1111. Topics include solutions, acid/base reactions, chemical thermodynamics, chemical kinetics, gaseous equilibria, acid/base and solubility chemical equilibria, electrochemistry, nuclear chemistry, and descriptive organic and inorganic chemistry. Laboratory complements lecture topics and emphasizes qualitative and quantitative measurements, and data interpretation and manipulation. Prerequisites: CHEM 1110, 1111. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.
CHEM 1122 (3) and 1123 (1) Honors General Chemistry II and Laboratory (Formerly CHEM 1022 and 122K). A continuation of CHEM 1112, 1113. Topics covered are similar to CHEM 1120, 1121, but the depth of understanding expected is greater. Prerequisites: CHEM 1112, 1113. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 2010 (3) and 2011 (1) Organic Chemistry I and Laboratory (Formerly CHEM 211 and 211L). A systematic study of the physical and chemical properties of hydrocarbons and their derivatives. Topics include chemical bonding, structural formula and physical properties, nomenclature, stereochemistry, synthesis and reactions of alkanes, alkenes, alkynes, alkyl halides, and alcohols. Reaction mechanism is emphasized. Laboratory component focuses on reaction set-ups, recrystallization, melting point, distillation, extraction, chromatography, and reactions. Prerequisites: CHEM 1120, 1121, or CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Formerly CHEM 211, 211L. CHEM 2010, 2011 is required of all Chemistry majors. Offered in fall, spring, and summer.
CHEM 2012 (3) and 2013 (1) Honors Organic Chemistry I and Laboratory (Formerly CHEM 211H and 211K). For Chemistry majors and University Honors Program students only. Topics are similar to CHEM 2010, 2011, but covered in greater detail. Prerequisites: CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 2020 (3) and 2021 (1) Organic Chemistry II and Laboratory (Formerly CHEM 212 and 212L). A continuation of CHEM 2010, 2011. Emphasis is on the synthesis, reactions, and spectroscopic identification of aromatic compounds, carbonyl compounds (includes aldehydes, ketones, carboxylic acids and their derivatives), and amines. Reaction mechanism is strongly emphasized. Laboratory component exposes students to multi-step synthesis, and spectroscopic and chromatographic characterization of reaction products. Prerequisites: CHEM 2010, 2011. Three lectures and one three-hour laboratory per week. Formerly CHEM 212, 212L. CHEM 2020, 2021 is required of all Chemistry majors. Offered in fall, spring, and summer.
CHEM 2022 (3) and 2023 (1) Honors Organic Chemistry II and Laboratory (Formerly CHEM 212H and 212K). A continuation of 2012, 2013. Topics covered are similar to CHEM 2020, 2021, but covered in greater detail. Prerequisites: CHEM 2012, 2013. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 2100 (3) and 2101 (1) Introduction to Analytical Chemistry and Laboratory (Formerly CHEM 210 and 210L). Quantitative methods of chemical analysis. Topics include data manipulation, error analysis and statistical methods; chemical equilibria; acid/base, complexometric and precipitation titrimetry; spectrometric methods; chemical separations and chromatography; analytical glassware, equipment, and instrumentation; and use of computer spreadsheet programs. Laboratory component directly parallels lecture topics. Prerequisites: CHEM 1120, 1121, or CHEM 1122, 1123. Three lectures and one three-hour laboratory per week. Formerly CHEM 210, 210L. Required of all Chemistry majors. Offered in fall and spring.
CHEM 2500 (3) Introduction to Pharmacology (Formerly CHEM 250). An introductory study of mechanisms, dosages, and side effects of pharmacological classes of medication. Three lectures per week. Offered only in fall.
CHEM 3000 (3) Introduction to Inorganic Chemistry (Formerly CHEM 300). An introduction to descriptive inorganic chemistry. Emphasis is on periodicity in structure and reactivity. Topics include bonding, boron chemistry, catalysis, coordination compounds and reaction mechanisms, electronic spectroscopy, and bio-inorganic chemistry. Prerequisites: CHEM 1120, 1121. Offered only in the fall.

CHEM 3185, 3186, 3187 (3, 3, 3) Cooperative Education I, II, III (Formerly CHEM 318A, B, C). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industrial setting. Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activities and progress are monitored, evaluated, and graded by a fulltime faculty member. Prerequisite: permission of Department Chair. Offered in fall, spring, and summer.

CHEM 3200 (3) and 3201 (1) Physiological Biochemistry and Laboratory (Formerly CHEM 320 and 320L). The fundamentals of human physiological chemistry. Required of majors in foods and nutrition. Prerequisites: CHEM 3600, 3601. Not available for students having credit for CHEM 4700. Three lectures and one three-hour laboratory per week. Offered only in spring.
CHEM 3210 (3) and 3211 (1) Physical Chemistry I and Laboratory (Formerly CHEM 321 and 321L). Topics covered include the laws of thermodynamics and their application to physical processes and chemical systems, ideal and real gases, single and multi-component phase equilibrium, solutions of non-electrolytes and electrolytes, and electrochemistry. Laboratory component emphasizes the material covered in lecture. Prerequisites: MATH 1910 CHEM 2100, 2101, and either CHEM 2020, 2021 or CHEM 2022, 2023. Three lectures and one three-hour laboratory per week. Offered only in fall.
CHEM 3220 (3) and 3221 (1) Physical Chemistry II and Laboratory (Formerly CHEM 322 and 322L). A continuation of CHEM 3210, 3211. Topics include kinetic molecular theory, transport processes, reaction kinetics, quantum mechanics, atomic structure, molecular electronic structure, spectroscopy, and photochemistry. Prerequisites: CHEM 3210, 3211. Three lectures and one three-hour laboratory per week. Offered only in spring.

CHEM 3410 (3) and 3411 (1) General Biochemistry I and Laboratory (Formerly CHEM 341 and 341L). A study of the chemical and physical properties and biological functions of proteins, carbohydrates, lipids, and nucleic acids. Topics include cell membranes, enzyme kinetics and mechanisms, replication, transcription, and translation. Prerequisites: CHEM 2010, 2011. Laboratory component emphasizes ionization of acids and bases, pH and buffers, important biochemical techniques, and the chemistry of the major classes of biological compounds. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.

CHEM 3420 (3) and 3421 (1) General Biochemistry II and Laboratory (Formerly CHEM 342 and 342L). A continuation of CHEM 3410, 3411. Study of the major catabolic and anabolic pathways, including their chemical reactions, energetics, and regulation. Additional topics include hormones, vitamins, and biochemical function of various organs. Prerequisites: CHEM 3410, 3411. Laboratory emphasizes biochemical and molecular techniques associated with the study of metabolism. Three lectures and one three-hour laboratory per week. Offered in fall, spring, and summer.
CHEM 3500 (3) Atmospheric Chemistry. A study of the chemical processes determining the composition of the Earth's atmosphere including photochemistry, kinetics, thermodynamics, and biogeochemical cycling. This knowledge is applied to the study of aerosols and their impacts on climate and visibility, stratospheric ozone and ozone depletion, oxidation chemistry, ozone air pollution and acid rain, and Arctic and Atmospheric chemistry. Prerequisites: CHEM 2020, 3210. Recommended: CHEM 2100. Offered on demand.
CHEM 3600 (3) and 3601 (1) Organic Chemistry and Organic Survey Laboratory (Formerly CHEM 360 and 360L). Study of important classes of organic compounds. Emphasis is placed upon the study of hydrocarbons and their principal derivatives: carbohydrates, proteins, fats, oils, vitamins, and dyes. Designed for majors in Agriculture, Home Economics, and Allied Health. Prerequisites: CHEM 1120, 1121. Not available for students having credit for CHEM 2010, 2020. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 3710 (3) Methods of Teaching High School Chemistry (Formerly CHEM 371). A course in the methods of teaching chemistry in the secondary school. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all Chemistry majors in the Teacher Education Program. Prerequisite: official admission to the Teacher Education Program. Offered on demand.
CHEM 4005 (3) Special Topics in Analytical Chemistry. Selective topics in Analytical Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4006 (3) Special Topics in Biochemistry. Selective topics in Biochemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4007 (3) Special Topics in Inorganic Chemistry. Selective topics in Inorganic Chemistry which are current and relevant to the discipline. Prerequisite: Permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4008 (3). Special Topics in Organic Chemistry. Selective topics in Organic Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4009 (3). Special Topics in Physical Chemistry. Selective topics in Physical Chemistry which are current and relevant to the discipline. Prerequisite: permission of the instructor. Three lectures per week. Offered on demand.

CHEM 4100 (2) Scientific Communications (Formerly CHEM 410). A focus on writing, oral, and library skills involving scientific information. Writing skills include the preparation of laboratory notebooks, term papers, and research papers. Oral skills concentrate on presentations of scientific results. Library skills include on-line and library literature search for chemical information. Prerequisites: CHEM 2100, 2101, or 2020, 2021. Two one-hour lectures per week. Offered only in spring.

CHEM 4200 (3) and 4201 (1) Inorganic Chemistry I and Laboratory (Formerly CHEM 420 and 420L). Topics include atomic and molecular structure, quantum mechanics, atomic and group theory, solid state chemistry, acid/base and oxidation/reduction chemistry, and the chemistry of metal complexes. Laboratory provides experience in the synthesis and characterization of inorganic compounds. Prerequisites: CHEM 2020, 2021. Three lectures and one three-hour laboratory per week. Offered only in fall.

CHEM 4210 (3) Inorganic Chemistry II (Formerly CHEM 421). A continuation of CHEM 4200. Course provides a systematic survey of the descriptive chemistry of the elements, building on the theories presented in CHEM 4200. Prerequisites: CHEM 4200, 4201. Offered only in spring.
CHEM 4320 (3) and 4321 (1) Instrumental Analysis and Laboratory (Formerly CHEM 432 and 432L). Principles and applications of analytical instrumentation, including electrometric, spectrometric, and chromatographic principles. Prerequisites: CHEM 2100, 2101, 3220, 3221. Three lectures and one three-hour laboratory per week. Offered only in spring.
CHEM 4400 (3) Organic Reaction Mechanisms (Formerly CHEM 440). A selective treatment of theoretical and mechanistic aspects of organic chemistry. Course includes an introduction to molecular orbital theory and its application to bonding. Aromatic, pericyclic elimination, and addition reactions are thoroughly treated. Emphasis is on reaction mechanism. Prerequisites: CHEM 2020, 2021, 3220, 3221. Three lectures per week. Offered only in fall.

CHEM 4420 (3) Medicinal Chemistry. Medicinal chemistry is a chemistry-based discipline that uses the fundamental concepts of organic chemistry to solve health-related problems. In addition, it involves aspects of biological, medical, and pharmaceutical sciences. It is concerned with the invention, discovery, design, identification and preparation of biologically active compounds, the study of their metabolism, the interpretation of their mode of action, and the development of structure-activity relationship (SAR). Drug development, production, and approval by the Food and Drug Administration are also covered. Pre-requisites: CHEM 2010 and 2020. Offered in Spring.

CHEM 4500 (3) Cancer Biochemistry and Biology. An in-depth study of the biochemical and biological basis of cancer. Topics include biochemistry/biology of: cellular oncogenes; growth factor receptors; tumor suppressors; angiogenesis; invasion and metastasis; and cancer treatment. Prerequisites: CHEM 3410 or Permission of the instructor. Three hours of lecture per week. Offered only in Spring.

CHEM 4505, 4506 (2, 2) Senior Project I, II (Formerly CHEM 450A, 450B). A special laboratory investigation carried out under the direction of the instructor. Emphasis is on scientific research and report writing. Must be taken in sequence. Students are expected to spend at least ten hours per week on their research project(s). Prerequisites: CHEM 3220, 3221 or 3320, 3321. Corequisites: CHEM 4910, 4920. CHEM 4505 offered only in fall, 4506 only in spring.

CHEM 4600 (3) Spectroscopic Methods in Chemistry (Formerly CHEM 460). Various spectroscopic methods in chemistry, concentrating on the practical aspect of using spectroscopic techniques to solve structural problems. Techniques include ultraviolet spectroscopy, infrared spectroscopy, nuclear magnetic resonance (NMR) spectroscopy, including Two Dimensional (2-D) NMR in solving problems, and mass spectrometry (MS). Prerequisites: CHEM 2020, 2021, 3220, 3221. Three lectures per week. Offered only in fall.

CHEM 4610, $4620(3,3)$ and 4621 (1) Introduction to Polymer Chemistry I, II and Laboratory (Formerly CHEM 461, 462 and 462L). Organic chemical reactions leading to high polymers, physical properties and physical behavior of polymers, polymer processing, and end uses. Prerequisites: CHEM 2020, 2021, or permission of instructor. Three lectures and one three-hour laboratory per week. CHEM 4610 offered only in fall, 4620 and 4621 only in spring.

CHEM 4700 (3) and 4701 (1) Biochemical Analysis and Laboratory (Formerly CHEM 470 and 470L). Designed to familiarize the student with the principles and practices involved in the analysis of biological and biochemical materials. Topics include separation systems, molecular spectroscopy, radioactivity, ionic strength, and analysis of macromolecules. Laboratory component emphasizes the topics covered in the lectures. Prerequisites: CHEM 2100, 2101, 3320, 3321, 3420, 3421. Three lectures and one three-hour laboratory per week. Offered only in fall.
CHEM 4720 (9) Student Teaching in Chemistry (Formerly CHEM 472S). A semester-long experience of supervised practice teaching appropriately divided between middle and secondary schools. Required of all students seeking certification in teaching Chemistry. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently. Offered on demand.

CHEM 4800 (3) Advanced Pharmacology. An in-depth discussion of the principles of pharmacology and how it applies to the evaluation and development of drugs. Topics covered include pharmacokinetics, absorption, metabolism, distribution, transport mechanisms and clinical aspects. Prerequisite: CHEM 3410. Offered only in the Fall.

CHEM 4830 (3) Advanced Physical Chemistry (Formerly CHEM 483). A systematic survey of classical transport processes, kinetic molecular theory, statistical mechanics, and absolute reaction rate theory. Prerequisites: CHEM 3220, 3221. Offered only in spring.
CHEM 4910, 4920 (1, 1) Seminar (Formerly CHEM 491, 492). Required of all senior Chemistry majors. Must be taken in sequence. Prerequisites: CHEM 3220, 3221 or 3320, 3321. CHEM 4910 offered only in fall, 4920 only in the spring.

## Department of Family and Consumer Sciences

Chiquita A. Briley, Ph.D., Interim Department Chair 107 Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex (615) 963-5601

Faculty: S. Ballard de Ruiz, R. Fleming, F.C. Chen, S. Godwin, A. Kilonzo-Nthenge, M. Machara, G. Matthews, V. Oates, H.W. Si, L. Speller-Henderson

General Statement: The purpose of the undergraduate program in the Department of Family and Consumer Sciences is to provide both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant. The program includes study of nutrition, food, health, clothing, textiles, management of resources, design, care and guidance of children, human growth and development throughout the life span, interpersonal relationships, and family relationships, with emphasis on breadth of knowledge and its application to the solution of contemporary human problems.

The unifying focus is on an integrative approach to relationships among individuals, families, and communities and the environments in which they function. The program seeks to (a) empower individuals, (b) strengthen families, and (c) enable communities.

Specifically the mission of the Department of Family and Consumer Sciences is to prepare individuals for leadership roles in professional family and consumer sciences careers who can use an integrated approach to relationship to improve the quality of life for individuals, families, and communities through; (a) education, prevention and development; (b) discovery of new knowledge and extension of this knowledge to an increasingly global community; and (c) service to the community.

The goals of the undergraduate programs in the Department of Family and Consumer Sciences are to prepare individuals for (1) graduate and professional programs, (2) communicating family and consumer sciences concepts in formal and non-formal settings, (3) professional careers as entrepreneurs in business, the international arena, the public and government sectors and other agencies serving children and families, and (4) improved personal development including family life. In addition, the goal is to prepare empowered individuals who (5) can think critically, (6) empower others to live a more satisfying life, and (7) are committed to service.

## Student Learning Outcomes

The graduates will:

1. Have specialized knowledge and skills in the concentration/major areas to address work roles in their professional careers in education, government, industry and society;
2. Have the capability to write research reports including identifying implications of research;
3. Analyze and interpret data for implication in work and personal life;
4. Use critical thinking skills to utilize diverse approaches for determining alternative solutions for issues;
5. Communicate information to diverse groups at all levels of expertise;
6. Recognize, respect, and value individual and societal diversity;
7. Reflect on one's own practices, articulate a philosophy and rationale for decisions, and continually self-assess as a basis for program planning and modification and continuing professional development;
8. Establish and maintain positive, collaborative relationships with colleagues, other professionals, and families and work effectively as a member of a professional team;
9. Practices ethical professional practice;
10. Have the knowledge and skills to become advocates for public policy as related to individuals, families and communities;
11. Use technology effectively in their work and family life;
12. Pursue lifelong learning;
13. Have an understanding of their responsibilities to their communities and the global society;
14. Demonstrate understanding of the synergistic, integrative nature of the family and consumer sciences profession with its focus on the interrelationships among individuals, families, consumers, and communities as taught in human systems theory and life course development and students apply this understanding the study of their areas of specialization.

## Accreditation

The Department of Family and Consumer Sciences is accredited by the American Association of Family and Consumer Sciences (AAFCS). The Didactic Program in Dietetics (DPD) is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), Academy of Nutrition and Dietetics (AND), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312)899-0040, ext. 5400.

## Departmental Admission/Retention Requirements

All Family and Consumer Sciences majors must have a "C" or better in all courses in their area of concentration in order to graduate.
Admission/Retention Requirements for the Didactic Program in Dietetics (DPD)

The DPD at TSU provides the necessary coursework to meet the academic requirements of the Accreditation Council for Education in Nutrition and Dietetics (ACEND), Academy of Nutrition and Dietetics.
Admission Requirements: Prospective students must meet admission requirements and must apply for admission to this program. These requirements include:

1. Cumulative GPA $=2.75$ or better
2. Achievement of at least junior status at the university (i.e. 60+ hours). These hours must include the courses listed in items 3 and 4.
3. Grade of $B$ or better in the following courses:

NUFS 1110 - Food Preparation and Meal Management NUFS 2110 - Elementary Nutrition
4. Grade of $C$ or better in each of the following courses: BIOL 2210 and 2211 - Anatomy and Physiology I/Lab CHEM 1110 and 1111- General Chemistry I and lab CHEM 1120 and 1121 - General Chemistry II and lab
5. Completion of application packet, which includes:
a. DPD admission application
b. Current transcripts from TSU and/or any other relevant Universities or colleges attended
c. Completion of interview with dietetics faculty

Upon admission, all students are required to complete the coursework outlined on the curriculum map. When the majority of the coursework has been completed, and the student has maintained a minimum of a 2.75 GPA , the student is eligible to apply for a post-baccalaureate supervised practice experience, i.e. a dietetic internship or ISPP.

Before entering an internship, students must receive a Verification Statement Form from the DPD Director. Criteria to receive the form include:

- Completion of all required courses. Student must have a C or better in courses that are designated as meeting KRD's.
- Minimum 2.75 GPA
- Passage ( $75 \%$ or greater) on the comprehensive DPD examination


## Teacher Education Admission and Retention Requirements:

Degree candidates seeking teaching certification in Early Childhood Education and Family and Consumer Sciences Education must meet requirements designed for the Teacher Education Program as below.
Each student who desires to be a candidate for admission to the Teacher Education Program will make application to the Director of Student Services and Teacher Education in the second semester of the sophomore year. The student must have earned a cumulative 2.75 GPA, and acceptable scores on PRAXIS I or the Computer Based Test (CBT).
Further clarification of the Teacher Education Program can be found in the College of Education section of this catalog; "Admission, Retention, and Student Teaching Requirements for the Teacher Education Program." Students are required to complete 9 semester hours of student teaching which includes a dual placement. The Teacher Education Program was changed according to the Reach2Teach Program that was implemented Fall 2013.
Admission/Retention Requirements for Dietetics Concentration Programs in the Department
Students may elect majors or concentrations in the following:
Early Childhood Education (PreK-3 certification)
Family and Consumer Sciences with concentration in one of the following:

- Design
- Fashion Merchandising
- Family and Consumer Sciences Education
- Foods and Nutrition and Dietetics

Upper level students enrolled in any program can elect to complete the courses for the Family Financial Planning Program. The Department offers a Family Financial Planning Program that is designed to prepare professionals in personal financial planning who will have the knowledge and skills necessary to qualify to take Certified Financial Planner Board of Standards, Inc. (CFP Board) exam. Completing the six courses in Family Financial Planning courses at Tennessee State University, receiving a bachelor's degree, passing the CFP exam and gaining the appropriate work experience will lead to the granting of the CFP( $r$ ) certification which is a recognized standard of excellence for personal financial planning.
Due to the explosion of a rapidly changing and increasingly complex financial marketplace, families are searching and requesting assistance from financial professionals in managing their income, assets, debts, and much more. Financial service providers have noted this phenomenon and have extended their services to provide comprehensive financial assistance. Financial planners are employed in the marketplace with companies that specialize in retirement, equity trading, insurance, and real estate In addition; personal financial planners may work as a personal financial counselor in a company or may be self-employed.

## Bachelor of Science Degree in Early Childhood Education With Teacher Certification Pre K-3 Suggested Four Year Program

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ART 1010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| ECFS 1010 | 3 | MATH 1110 | 3 |
| GEOG 1010 or 1020 | 3 | FACS 1010 | 1 |
| BIOL 1010, 1011 | 4 | ASTR 1020,1021 | 4 |
|  | 14 |  | 14 |


| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010 or 2110- | 3 | MATH 1420 | 3 |
| 2320 |  |  |  |
| HIST 2010/2012 | 3 | HIST 2030 | 3 |
| ECFS 2010 | 3 | COMM 2200 | 3 |
| EDCI 2010 | 3 | MUSC 1010 | 3 |
| POLI 2010 | 3 | ECFS 3320 | 3 |
| MATH 1410 | 3 |  |  |
|  | 18 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 3730 | 3 | EDRD 3500* | 3 |
| EDSE 3330 | 3 | ECFS 4600 | 3 |
| ECFS 3610 | 3 | ECFS 3520 | 3 |
| NUFS 3330 | 3 | EDCI 3220 | 3 |
| ECFS 4000 | 3 | ECFS 4630 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ECFS 4650 | 3 | ECFS 4720 | 3 |
| EDCI 4600* | 3 | EDCI 4706 | 9 |
| EDCI 4500* | 3 |  |  |
| EDCI 4550 | 3 |  |  |
| EDCI 4620 | 6 |  |  |
|  | 18 |  | 12 |

*Prerequisite admission to Teacher Education

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Child Development and Family Relations - Suggested Four Year Program

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ART 1010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| ECFS 1010 | 3 | MATH 1110 | 3 |
| FACS 1010 | 1 | GEOG 1010 or 1020 | 3 |
| BIOL 1010,1011, or | 4 | BIOL 1020, 1021, or | 4 |
| Gen. Ed. Natural |  | Gen. Ed. Natural |  |
| Science |  | Science |  |
| MUSC 1010 | 3 |  |  |
|  | 15 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010-2024 | 3 | COMM 2200 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| ECFS 2010 | 3 | EDCI 2010 | 3 |
| DIGN 2010 or FASH | 3 | ECFS 3320 | 3 |
| 1120 |  |  |  |
| SOCI 2010 | 3 | ECFS 3020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ECFS 3610 | 3 | ENGL 3730 | 3 |
| EDSE 3330 | 3 | ECFS 3520 | 3 |
| FERM 3210 or FERM | M 3 | ECFS 3530 | 3 |
| 4330 |  |  |  |
| NUFS 3330 | 3 | ECFS 4630 | 3 |
| PSYC 3120 or 2180 | 3 | ECFS 4600 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ECFS 4650 | 3 | ECFS 4660 | 9 |
| ECFS 4000 | 3 | SOWK 4700 | 3 |
| Electives(3000-4000 level) | 2 |  |  |
| FACS 4500 | 3 |  |  |
| ECFS 4620 | 3 |  |  |
| ECFS 4520 | 3 |  |  |
|  | 17 |  | 12 |

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Design Suggested Four Year Program

FRESHMAN YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :---: | :---: | :---: | :---: |
| UNIV 1000 | 1 | ART 1010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| FASH 1110 | 3 | MATH 1110 | 3 |
| DIGN 2010 | 3 | CHEM 1020, 1021 or | 4 |
| CHEM 1010,1011 or Gen. Ed. Natural Sci | 4 | Gen. Ed. Natural Sci. |  |
| FACS 1010 | 1 | THTR 1020 | 3 |
|  | 15 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 2010-2024 | 3 | $\begin{aligned} & \text { FASH } 2110 \text { or AREN } \\ & 4300 \end{aligned}$ | 3 |
| HIST 2010 | 3 | Social Science Elect. | 3 |
| $\begin{aligned} & \text { FASH } 2030 \text { or AREN } \\ & 2310 \end{aligned}$ | , 3 | HIST 2020 | 3 |
| DIGN 3000 | 3 | COMM 2200 | 3 |
| NUFS 2110 or NUFS | 3 | ECON 2010 | 3 |
| 2 |  |  |  |
|  | 15 |  | 15 |


| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| FACS 3730 | 3 | DIGN 3010 | 3 |
| DIGN 3100 | 3 | DIGN 4110 | 3 |
| FASH 4130, 3220 or | 3 | DIGN 4350* | 6 |
| THTR 4000, 4020 | ECFS 4630 |  |  |
|  |  |  | 3 |
| DIGN 3500 or 3400 | 3 |  |  |
| DIGN 3230 | 3 |  |  |
|  | 15 |  | 15 |
| *Summer Only |  |  |  |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| DIGN 4120 | 3 | DIGN 4000 | 3 |
| DIGN 2200 | 3 | DIGN 4210 | 3 |
| FACS 4500 | 3 | DIGN 4200 | 3 |
| Elective | 3 | Electives (3000 or 4000 | 6 |
| FERM 4330 | 3 | level) |  |
|  | 15 |  | 15 |

Bachelor of Science Degree in Family and Consumer Sciences Concentration in Fashion Merchandising Suggested Four Year Program

|  | FRES | MAN YEAR |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | NUFS 2110 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| FASH 1110 | 3 | FASH 1120 | 3 |
| MATH 1110 | 3 | FACS 1010 | 1 |
| ART 1010 | 3 | Humanities Elective | 3 |
| Gen. Ed. Natural | 4 | Gen. Ed. Natural | 4 |
|  | 17 |  | 17 |
|  | SOPHO | MORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ECON 2010 | 3 | FASH 2110 | 3 |
| DIGN 2010 | 3 | ECON 2020 | 3 |
| ACCT 2010 | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | COMM 2200 | 3 |
| FASH 2030 | 3 | ENGL 2010-2024 | 3 |
|  | 15 |  | 15 |
|  | JUN | IOR YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| DIGN 3100 | 3 | ECFS 4630 | 3 |
| DIGN 3000 | 3 | MKTG 3010 | 3 |
| FASH 3000 | 3 | FERM 4330 or 3210 | 3 |
| DIGN 3230 | 3 | FASH 4150* | 6 |
| FACS 3730 | 3 |  |  |
|  | 15 |  | 15 |

*Summer Only

FALL SEMESTER HR. SPRING SEMESTER HR.
FASH 40303 Elective (3000-4000 level) 5
MKTG 3200 MKTG 42503
FASH $4000 \quad 3 \quad$ FASH 4140
FACS $4500 \quad \frac{3}{12}$ FASH $4440 \quad \frac{3}{14}$
*Summer Only
Bachelor of Science Degree in Family and Consumer Sciences Concentration in Foods and Nutrition - Dietetics Verification -Suggested Four Year Program

FRESHMAN YEAR
FALL SEMESTER
UNIV 1000
HR. SPRING SEMESTER HR
ENGL 1010
1 ENGL 10203
3 CHEM 1120, 1121

DIGN 3230 Space Planning (3). An introductory course in the interior design profession in which students apply the design elements and principles to interior design. Studio problems in designing living spaces for family living. Lab-lecture. Prerequisite: DIGN 2010. Fall Semester

DIGN 3400 Presentation Techniques (3). In this course students will gain knowledge and experience in portfolio development and presentation skills. Emphasis is placed on writing and vocalizing design concepts and the design process, developing presentation drawings, renderings and boards. Prerequisite: DIGN 2010. Fall Semester

DIGN 3500 Studio Design Laboratory (3). A course designed for students who wish to experiment with art studio problems, related art problems, design inspiration and media with guidance of instructor. Prerequisite: DIGN 2010. Fall Semester

DIGN 4000 History of Interiors (3). A course which includes a study of the historical and contemporary interiors, traditional and modern, classic Asian, European and current influences, and contemporary. Spring Semester Design 4110 Non-residential Design (3). A studio course in which students utilize the design process in the analysis and planning of non- residential interior environments such as healthcare, restaurant, preschool, and retail facilities. The course includes a study of current codes relating to health, safety, and handicapped accessibility in non-residential design. Prerequisite: DIGN 2010 and 3230 or consent of instructor.

DIGN 4120 Furniture Design and Decorative Finishes (3). A course in which students design and execute art crafts using inexpensive materials and tools. The content of the course includes: relationship of design to function, materials, tools and techniques; understanding educational, economic, social, recreational and therapeutic art craft work. Emphasis is placed on making creative objects of original design. Lab-lecture. Fall Semester: Even Years

DIGN 4200 Experimental Textile, Apparel and Design (3). A course which covers creative and technical aspects of designing textiles, apparel, accessories, and home fashions. Original designs with exercises in various media, direct, indirect and accidental methods will be used to stimulate ideas and involve the students in the process of exploring and awakening intellectual and creative potentials. Lablecture. Prerequisite: DIGN 2010 or consent of instructor. Spring Semester

DIGN 4210 Interior Architecture (3). A course whose major topics for this course are: problems in designing for living; integration of structural concepts; design in relation to site, house and interior environment; selection and coordination of furniture, fabrics, materials, accessories in interior space laboratory. Lab-lecture. Prerequisites: DIGN 2010 \& 3230. Spring Semester
DIGN 4350 Internship/Seminar/Options (6). A course in which students gain experience in established firms, institutions, showrooms, etc. Students are introduced to many practical applications of design theory directed toward various aspects of the fashion, interior, visual and fabric structure and decoration industry as well as specialized teaching. Each option is to be executed under the supervision of the concentration coordinator. Senior standing in curriculum required. Summer Semester.

## Early Childhood, Child Development, and Family Relationships (ECFS)

ECFS 1010 Introduction to Early Childhood \& Child Development (3). A study of staff roles in a variety of pre-school programs for children in

Middle Tennessee. The first half of the semester will be spent in observation, the second in a practicum as an aide functioning in a variety of roles. Fall Semester

ECFS 2010 Principles and Concepts of Child Development (3). A study of the basic principles and concepts of growth and development which serve as a foundation in understanding children from birth to age 8. Observation and laboratory experiences are required.

ECFS 3020 Middle Childhood and Adolescence (3). A course in which students study human development from later pre-school through adolescence (5-18) years. Prerequisite: ECFS 2010 Spring Semester

ECFS 3320 Expressive Arts for Young Children (3). A course in which students interpret and are involved with (1) art learning activities, (2) self-directed activities, and (3) integrated activities with emphasis on the role of creative play. Prerequisites: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3520 Observation, Participation and Assessment in Early Childhood Settings (3). Observation and participation in early childhood settings. A course required of students concentrating in Child Development and Family Relationships. This course will address appropriate observation methods and assessment tools for use in early childhood settings. Laboratory experiences required. Prerequisites: ECFS 2010 or ECFS 3510. Spring Semester

ECFS 3530 Infant Clinic (3). A course designed to address the human development process from birth to 2 years of age and the relative influences of the environment on socialization. Emphasis is placed on the various theories and curricula being followed in quality day-care programs for infants. Observation/participation in infant programs required. Prerequisite ECFS 2010.

ECFS 3610 Early Childhood Curriculum I (3). A course in which students design curricula in Early Childhood Education, including learning how to write general goals and behavioral objectives for lesson plans, and discussing forces that affect curriculum. Prerequisites: observation in a variety of early childhood settings, ECFS 2010 or ECFS 3510. Fall Semester

ECFS 4000 Behavior Management and Guidance (3). This course examines positive guidance strategies for children from birth to eight years. Students will explore theoretical foundations related to child development and the implementation of various models to foster selfcontrol, organize the classroom environment and curriculum for prosocial skills, methods for addressing persistent and challenging behaviors. Emphasis will be on behavior management and on guidance strategies for preschool and early elementary children. The course will also explore a wide variety of issues in relation to parenting, child-rearing practices, and child-family relations. Required field experience. Prerequisite ECFS 2010.

ECFS 4520 Early Childhood Administration and Leadership (3). A course designed to familiarize students with the operational procedures of day care programs. Emphasis is placed on providing students with practicum experience relating to administering and supervising personnel, managing budgets, and developing computer programs. Observation/participation in Early Learning Center required. Fall Semester

ECFS 4600 Preschool and Kindergarten Methods and Materials (3). A study of methods, materials and modern trends of teaching in the nursery school and kindergarten. Organization, equipment, and housing in child care centers and public kindergartens are studied based on the developmental levels of children. Observation/ participation experiences in early childhood programs required. Prerequisite: ECFS 3320 and ECFS 3610 Spring Semester

ECFS 4620 Current Topics and Issues in Early Childhood Education (3). A course in which students study programs, trends and issues in child development and early education.

ECFS 4630 Family Relationships (3). A study of modern family life, giving special emphasis to the needs and activities of individuals as they relate to the development of the family throughout the life cycle. Spring Semester

ECFS 4650 Parenting/Practical Steps to Childrearing (3). A course in which students outline and examine contemporary problems of childrearing and focus on systematic and scientific methods of parenting. Subject areas to be examined are child abuse, socialization practices among various cultures, myths and misconceptions about effectiveness of punishment, the rights of children, principles of behavioral modification and parents of children with special needs. Fall Semester Prerequisite ECFS 2010.

ECFS 4660 Internship or Fieldwork in Child Development (9). A course in which students are provided an opportunity to student teach in the campus Early Learning Center. Taken with approval of the coordinator of Child Development and Family Relationships.

ECFS 4720 Observation and Student Teaching in Pre-K and K-3 (9). Supervised teaching experiences in both Pre-K and K-3 settings on a full-time basis for a semester. Seminars are integral parts of the student teaching experience. Prerequisite: This course is open only to students who have met the student teaching prerequisites. Spring Semester

## Family and Consumer Sciences Education (FACS)

FACS 1010 Family and Consumer Sciences as a Profession (1). A course designed to help students identify their goals and individual needs and explore possible family and consumer sciences career areas. Students gain knowledge of the history and philosophy of family and consumer sciences as well as public policy and issues and trends. One lecture.

FACS 3730 Entrepreneurship in Family and Consumer Sciences (3). A course that focuses on the application of knowledge to teaching entrepreneurship skills in family and consumer sciences programs and/or developing plans to become an entrepreneur using family and consumer sciences skills.

FACS 4500 Senior Project Writing (3). A course in which students develop skills related to techniques of professional writing, literature searching, and abstracting scientific material. Students will incorporate area-special concepts into an original project with an accompanying written component. Senior standing in curriculum required.

FACS 4600 Field Experiences in Food Service or Nutrition (2-6). A supervised work experience in the food service industry or in nutrition programs. Course includes class seminar. Senior standing in curriculum required. Summer Session

## Fashion Merchandising (FASH)

FASH 1110 Textiles (3). A consumer-oriented study of textiles, emphasizing fibers, yarns, fabric construction, finishes and socioeconomic background of the textiles and apparel industry in relation to end use. Lecture-laboratory. Fall Semester
FASH 1120 Cultural Interpretation of Dress (3). A study of the dynamic nature of the fashion phenomenon within the global society. Theories regarding psychological, social, cultural and economic forces of acquiring new styles will be explored. Learn about fashionable apparel worn in various cultures. Spring Semester

FASH 2030 History of Costume (3). The history of costume from ancient times to the present and the influence of social and economic conditions upon costume are covered in this course. Fall Semester

FASH 2110 Principles of Apparel Construction (3). Students learn the fundamental techniques of sewing various apparels. Students apply these sewing skills in the construction of apparels. Lecture-laboratory. Spring Semester

FASH 3000 Apparel Quality Analysis (3). A study of various techniques of evaluating silhouettes, structural and decorative details of apparel. The degree of excellence displayed in construction will be examined. Prerequisites: FASH 2110 and DIGN 3010. Fall Semester

FASH 3120 Applied Dress Design (3). The students learn the application of elements and principles of design as they relate to clothing. Emphasis is placed upon problem solving and the functional, structural and decorative aspects of apparel design. Prerequisites: FASH 2110 and DIGN 3010. Spring Semester: Even Years

FASH 3210 Tailoring (3). A course in which students learn advanced construction methods. Students construct a tailored garment. Emphasis is also placed on selection and care of garments. Prerequisite: examination in construction skills and/or FASH 2110. Fall Semester: Odd Years

FASH 3220 Flat Pattern Adaptation (3). A study of the principles and techniques of flat pattern design and application of these principles to commercial pattern alteration. The development of original designs is emphasized. Prerequisite: FASH 2110. Spring: Odd Years

FASH 4000 Display Merchandising (3). Presentation of merchandise, coordination elements and principles of design, properties and the art of arranging soft goods through a visual medium. Concepts and tools of selling merchandise in numerous retail settings for increasing sales are covered. Fall Semester

FASH 4030 Clothing Economics (3). A study of the problems in various aspects of buying fashions. Emphasis is on the planning involved in marketing of merchandise and computer applications in retailing. Spring Semester

FASH 4130 Dress Design and Draping (3). A course in dress design with emphasis on originality and draping. Opportunity is given to students to investigate sources of design and to practice various methods of designing. Prerequisite: FASH 2110 \& DIGN 2010. One lecture and two laboratory periods. Fall: Even Years

FASH 4140 Fashion Merchandising Seminar (3). A study of the techniques and strategies used to correctly gauge current and future market demands, purchase products from a manufacturer and then convince shoppers to buy the products. Spring Semester

FASH 4150 Internship (6). A temporary period of supervised work experience which provides the student an opportunity to apply theoretical knowledge to a work situation. Internship is designed to give students supervised work experience in an area of fashion merchandising. Prerequisites: (1) junior level or above in Family and

Consumer Sciences, (2) a job in clothing and/or textiles retailing or merchandising, and (3) instructor's written approval. Summer Sessions

FASH 4440 Fashion Promotions and Events (3). Students learn to incorporate numerous elements of selling into a theatrical presentation using live models. Stages of planning fashion promotions by establishing the type of show, site, theme, budget, publicity, advertising and various press materials for producing a fashion show are implemented into an annual presentation. Students produce a major fashion show. Spring Semester

## Family Economics and Resource Management (FERM)

FERM 3210 Family Resource Management (3). A course which includes a study of the family as an ecosystem and how that ecosystem is influenced by and influences other larger systems. Attention is given to the problems faced by individuals and families in managing resources. The management process is viewed within an environmental context. Offered online Spring Semester

FERM 3500, Fundamentals of Family Financial Planning (3). This course introduces students to various financial planning topics that face families such as the financial planning process, client/planner interactions, time value of money applications, personal financial statements, cash flow and debt management, asset acquisition, and education planning. Risk management, investment planning, retirement planning, plan integration and ethics are also discussed. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.

FERM 3600, Insurance Planning for Families (3). This course introduces students to risk management and insurance decisions in personal financial planning. Topics include insurance for life, health, disability, property and liability risks, as well as annuities, group insurance, and long term care. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.

FERM 3700, Investment Planning For Families (3). This course provides the student with an understanding of the various types of securities traded in financial markets, investment theory and practice, portfolio construction and management, and investment strategies and tactics to meet a family's investment goals. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.

FERM 4100, Income Tax for Families (3). The course provides an overview of current tax law, income tax principles, taxation terminology. The course focuses on tax planning considerations, computations, and tax planning strategies including tax pitfalls that impact financial planning for families. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.
FERM 4200, Retirement Planning for Families (3). The intent of the retirement planning course is to provide individuals with knowledge of both public and private retirement plans. The public plans include Social Security, Medicare, and Medicaid. The private plans include defined benefit and defined contribution plans and their regulatory provisions. The specifics of the various plans are analyzed as well as non-qualified deferred compensation plans. Finally, issues that individuals face in retirement, such as life-styles choices and medical issues are discussed. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.

FERM 4300, Estate Planning for Families (3). The course focuses on the efficient conservation and transfer of wealth, consistent with the family's goals. It is a study of the legal, tax, financial and non-financial aspects of this process, covering topics such as trusts, wills, probate, advanced directives, charitable giving, wealth transfers and related taxes. This course is one of the six courses designed to prepare students for the Certified Financial Planning Certificate. Permission of instructor required. Offered online only.

FERM 4330 Consumer Education (3). A course which includes a study of consumer activities in the marketplace and the financial world. Emphasis is given to the most important areas in which individuals and families function as consumers. Offered each Fall Semester.

FERM 4800, Family Financial Planning Capstone Class (3). This capstone course is designed for students to demonstrate the skills to develop integrated financial plans for clients and communicate their
planning recommendations to those clients. Select topics included are ethics and professional responsibilities, laws, regulations, client communication, decision making, writing a financial plan, and implementing and monitoring the plan. Students are expected to utilize skills obtained in other courses and work experiences in the completion of a comprehensive personal finance case, other minicase studies, and calculation templates. Prerequisites: FERM 3500, 3600, 3700, 4100, 4200, and 4300. Offered online only.

## Foods and Nutrition (NUFS)

NUFS 1110 Food Principles and Meal Management (4). A study of foods from harvest to service. A consideration of economics, grade standards, sanitation, preparation and nutritional quality is included. The topics include the planning, preparation and service of nutritious attractive meals at various cost levels for different occasions with emphasis on the conservation of time, energy and money. Two lectures and two laboratory periods. Fall Semester. Prerequisite: Family and Consumer Sciences major or consent of instructor.

NUFS 2010 Basic Nutrition Principles (3). A course in which students study nutrition and its relationship to health. Emphasis is placed on functions, sources and deficiency symptoms for the various nutrients. Regulations surrounding food and related products are presented. Nutritional requirements throughout the life cycle are introduced. Fall Semester

NUFS 2110 Elementary Nutrition (3). A general course in nutrition with emphasis on scientific principles, metabolism and requirements for nutrients. Special topics of interest to health care professionals are discussed.

NUFS 3110 Food Science (3). A course which includes a study of the scientific principles of food preparation. Emphasis is placed on deviations from the norm and causes. Lecture and laboratory. Prerequisites: CHEM 1010 and NUFS 1110. Spring Semester, odd years.

NUFS 3120 Nutrition in the Global Community (3). In this course students apply basic nutrition principles to life situations. Course includes the study of current issues in nutrition, community resources, and world nutrition problems. Field experiences. Prerequisite: NUFS 2010 or 2110.

NUFS 3130 Foodservice Equipment and Cost Control (3). A course that assists the student with the tools necessary to plan a foodservice facility and to control the costs in such a facility. Purchase specifications, budgeting, forecasting, fiscal planning and cost analysis are covered in this class. Field experiences. Prerequisite NUFS 1110.

NUFS 3330 Maternal and Child Nutrition (3). A course which includes a study of nutrition as it relates to children from prenatal life through adolescence. Application of knowledge and nutrition education are emphasized. Experiences with Early Learning Center are included. Fall Semester

NUFS 3350 Life Span Nutrition (3). Physiologic and biochemical principles and results of current research are used to build a foundation for exploration of nutrition across the stages of growth and development, maturation and again. These serve as a basis for consideration of the social, economic, physiologic, and life style factors that influence nutrition status, food choices, and specific life stage concerns. Particular attention is paid to using the principles of nutrition in planning and implementing recommendations for dietary change. The course is designed for undergraduate students in dietetics and health-related programs. Perquisites: NUFS 2110; BIOL 2210 and 2220. Fall Semester.

NUFS 3830 Nutrition, Assessment, Behavior Change, and Counseling (3). Changing dietary habits is extremely difficult as evidenced by the high rates of obesity and diet-related diseases. This course provides future nutrition professionals nutrition assessment and counseling skills. Emphasis is placed on how behavior change theories, concepts, and models are used to promote diet and health. Prerequisites: NUFS 2110 Fall Semester

NUFS 4110 Advanced Nutrition (3). A study of chemical and physiological factors in digestion, absorption, and metabolism of nutrients. Reports of recent research and their relation to problems of human nutrition are studied. Prerequisite: NUFS 2010 or 2110 and CHEM 1110-1120 Spring Semester NUFS 4120 Quantity Food Procurement and Production (3). A course that includes a study of methods of purchasing and storing foods in quantity, organization of labor, standards of work materials, and meal planning, and
preparation in large quantities. Some experience is gained in the University Cafeteria or other food facilities. Prerequisite: NUFS 1110. Spring Semester

NUFS 4120 Quantity Food Procurement and Production (3). A course that includes a study of methods of purchasing and storing foods in quantity, organization of labor, standards of work, materials and meal planning, and preparation in large quantities. Some experience is gained in the University Cafeteria or other food facilities. Prerequisites: NUFS 1110 and NUFS 3130.
NUFS 4520 Foodservice Systems Management (3). A course that includes a study of institutional food service systems, professional ethics and qualifications for managers, employment procedures, personnel schedules, financial records, and computer applications. Field experience required. Prerequisite: NUFS 4120 or permission of coordinator.

NUFS 4530 Medical Nutrition Therapy (4). A study of the modifications of the normal diet in the treatment of disease, food and drug interactions, and the role of the dietitian in health care. Prerequisites: NUFS 4110, BIOL 2220, CHEM 3410. Field experiences and laboratory required.

NUFS 4540 Medical Nutrition Therapy II (3). A continuous study of the modifications of the normal diet in the treatment of disease, food and drug interactions and the role of the dietitian in health care. Prerequisites: NUFS 4530

NUFS 4620 Special Problems in Foods and Nutrition (3). An individual directed study and investigation involving techniques used in nutrition research and food service management. Prerequisite: permission of coordinator.

## The College of Business

Millicent Lownes-Jackson, Ph.D., Professor, Dean Avon Williams Campus www.tnstate.edu/business

(615) 963-7121

## General Statement

The College of Business at Tennessee State University is strongly grounded with a stellar reputation afforded by accreditation at both the undergraduate and graduate levels by the major international accrediting agency for business schools-AACSB International - The Association to Advance Collegiate Schools of Business. The College is poised to successfully fulfill its mission with new academic programs, new corporate alliances, new international partners, and a newly renovated academic facility on the Avon Williams Campus which includes a state-of-the art financial trading center.

## Vision

The College of Business strives to achieve national and international prominence in educating current and future business professionals for the global economy.

## Mission

Our mission is to educate current and future business professionals through innovative teaching and research focused on contemporary business concepts for the global economy, complemented with a commitment to service and lifelong learning.

## Guiding Principles and Core Values

## Accountability <br> Continuous Improvement <br> Diversity <br> Ethical Conduct <br> Excellence <br> Global Perspective <br> Mutual Respect <br> Scholarship

9. Service
10. Shared Governance

## Student Learning Goals

- Students will demonstrate essential elements of critical thinking.
- Students will demonstrate the knowledge to incorporate ethical perspectives in situations that may arise in conducting business.
- Students will demonstrate an understanding of fundamental attributes of the global economy.
- Students will communicate business information orally and in writing.
- Students will effectively apply technology in solving business problems.


## Instruction

The strong credentials of the full-time tenured and tenure-track faculty are exemplified by the fact that $100 \%$ hold a doctoral degree and the majority have practical business experience. Instruction is further strengthened by average class sizes of less than thirty students. The instructional program is designed to provide both traditional and innovative teaching approaches and the integration of business ethics, international business, and computer applications throughout the curriculum. Flexibility in class scheduling is provided by day, evening, weekend, and online course offerings.

## Research

The College of Business has a strong overall record in research productivity. Each faculty member remains current in his or her academic field and contributes to its advancement. The College has two approved Chairs of Excellence. The First Chair of Excellence in Business is currently designed to provide impetus for accounting research and activities as well as alliances in the community. The Chair of Excellence in Banking and Financial Services is designed to serve as a catalyst for enhancing the College's research as well as curriculum development in the area of banking and financial services. Additionally, the College is home to an international refereed journal, the Journal of Developing Areas.

## Public Service

Public Service is a strength of the College of Business. Services to the business community are provided through various vehicles including faculty directed student consulting, Voluntary Income Tax Assistance (VITA), and faculty involvement in the community.

## Accreditation

The College of Business is accredited at both the undergraduate and graduate levels by the prestigious AACSB International - The Association to Advance Collegiate Schools of Business.

## Student Development Services

## Advisement

General advising in the College of Business is available Monday through Friday in two advisement centers, Avon Williams Campus, Suite H-408, (615) 963-7138 and Main Campus, Student Development Center, Holland Hall, Room 103, (615) 963-5145. It is recommended that students visit one of these offices on a regular basis to ensure that they are informed about current requirements and procedures. Students desiring career and academic advisement should contact the department appropriate to their major for the assigned faculty advisor. A student handbook is available as a source of information on the College's website, www.tnstate.edu/business.
The student Development Center (SDC), located in Holland Hall on the Main Campus, is established to enhance academic
achievement and career success for business majors. The Center maintains a hands-on approach with students and guides them through the matriculation process. The SDC provides easy access to information about College of Business policies, internships, career opportunities, professional development, and student organizations. The Center also produces the College of Business Student Handbook, a guide to College of Business policies and matriculation requirements.

## International

The College of Business shares in the University's commitment to make international education and cultural understanding of vital importance; thus, our faculty continues to provide an international dimension to their courses and the opportunity for business students to participate in an international experience through study abroad programs. Additional efforts in international education include a linkage with the University of Ibadan in Nigeria, a signed contract to deliver MBA courses to students in Tianjin University in China and a feasibility study to examine opportunities for program delivery in India. These initiatives are aimed at increasing enrollment in the College of Business MBA program. Past international linkages with Northern Caribbean University in Jamaica, Tunis El Manar University in Tunisia, L'viv Institute of Management in Ukraine, and the Malawi Institute of Management have served as the foundation for the vibrant international dimension of the College of Business. The international focus of the College is further evident through the Journal of Developing Areas, an internationally recognized scholarly publication distributed throughout the world.

## Career Opportunities and Placement Services

The University's Career Development Center facilitates interviews and information sessions for students desiring internships as well as full-time career positions. Each fall, more than 200 companies recruit on our campus, which includes leading international firms such as: IBM, Dell, Cummins, Boeing, General Motors, and Kohl's. Because of these opportunities, TSU business graduates are contributing in companies throughout Nashville, the state, the nation, and the world. The College of Business has a Director of Experiential Learning and Career Engagement focused on providing expansive placement opportunities for business students.

## Student Organizations

The College of Business encourages its students to participate in extracurricular activities. To complement the total educational experience and to provide leadership opportunities, the following business student organizations are available: Alpha Kappa Psi, American Marketing, AITP (Association of Information Technology Professionals), Beta Alpha Psi, Beta Gamma Sigma, Economics and Finance Society, Finance and Investment Club, IMA (Institute of Management Accountants), MBA Student Association, National Association of Black Accountants, National Black MBA Association Collegiate Chapter, Society for Human Resources Management, and the Supply Chain Student Organization.

For information on these professional organizations, contact the Student Development Center at (615) 963-5145 in the College of Business located on the Main Campus in Holland Hall, Room 103, or contact the College of Business Office of Public Service on the Avon Williams Campus at (615) 9637369.

## Scholarships

Scholarships and academic awards are available on a competitive basis for College of Business majors. The awards are based on academic excellence, civic achievements, course of study, or other specific criteria developed by the
sponsor. The scholarships and awards are sponsored by businesses, College advisory and governing boards, industry, individuals and professional organizations. For more information and/or applications, contact the College of Business Office of Public Service on the Avon Williams Campus at (615) 963-7369.

## Business Community Involvement

Many corporate, business, and government alliances have been forged to further strengthen the College of Business. Through the College's six active advisory and governing boards, industry leaders graciously give their time, expertise, and financial resources to help ensure that our curriculum meets the needs of industry and that our students are prepared to professionally excel. The College is most appreciative of the support insightful industry leaders have provided by serving on its Accounting Advisory Board, Business Information Systems Technology Advisory Council, COB Board of Advisors, Economics and Finance Advisory Board, and Supply Chain Management Governing Board and Alumni Advisory Board. Some of the industry leaders serving on these boards include Dell, Boeing, Cummins, Genco, CINTAS, Corning, HCA, Ingram Barge, Wal-Mart, OH Logistics, Remars, Tractor Supply, Ingram Micro, Lexmark International, and Hoskins \& Company.

## Resources

In a broad sense, the entire business community of Nashville offers an ideal laboratory for student development. The College of Business is situated in the heart of downtown Nashville where faculty and students alike have ready access to sources of business and government information and relationships.

Special resources of the College of Business of particular interest to students are:

- Accounting Tutorial, Economics and Statistical Tutorial
- Department Chair of Excellence in Banking and Financial Services
- CISCO Lab, Database Lab, Microcomputer Labs, Networking Lab
- Financial Trading Room
- First Chair of Excellence in Accounting
- Hassan Adamu Distinguished Professorship
- Placement Services Provided by the University Career Development Center Office
- Special Academic Counselors
- Student Development Center
- Student Professional Organizations


## Majors in Business

Four undergraduate majors are offered in the College of Business. The curriculum for each of these majors is presented under the section describing each of the four academic departments of the College of Business.

| Departments | Majors/Degrees | Concentrations |
| :--- | :--- | :--- |
| Accounting | Accounting BBA | N/A |
| Business <br> Administration | Business <br> Administration <br> BBA | Supply Chain Mgmt. <br> Hospitality Management <br> Human Resource Mgmt. <br> Management <br> Marketing <br> General Business |
| Business <br> Information <br> Systems | Business <br> Information <br> Systems BBA | e-Business Technology <br> Industry |
| Economics <br> and Finance | Economics and <br> Finance BBA | Economics, Finance and <br> International Business |

A minor affords a traditional, well-accepted way to recognize that a student has completed a significant body of work outside the major field. Students may wish to follow up on long time personal interests, satisfy intellectual curiosity generated by introductory courses, enrich their undergraduate experience, differentiate their individual program of study from those of fellow students, or enhance their opportunities for employment or for admission to graduate or professional schools. Students outside the College of Business may apply for a minor in General Business or other minors offered by the College.

## Entrepreneurship Minor

Overview: The Minor in Entrepreneurship will prepare students to create and develop new ideas and provide them with the skills and knowledge to translate ideas into viable business entities. The program is designed for business and nonbusiness undergraduate students who desire a course of study that will prepare them to start their own businesses and afford them the opportunity to create their own path to success.

Prerequisites: The Minor in Entrepreneurship is available to both business and non-business majors. Some courses require pre-requisites that students must complete.

Entrepreneurship Minor Core (12 hours)
MGMT 32003
Entrepreneurship-New Venture Creation and Management MGMT 32403

Business Consulting and Entrepreneurship I
MGMT 3250 or MGMT 48003
Business Consulting and Entrepreneurship II or Internship (Entrepreneurship)
ACCT 3050 or MGMT 41703
Financial Information for Entrepreneurial Ventures or
Seminar-Contemporary Management: Innovation and
Entrepreneurship
Entrepreneurship Guided Electives (6 Hours)
Business majors should choose 2 courses not required for your major, concentration, or track from the list below. Nonbusiness majors should take ACCT 2020 and MGMT 3010 as their electives.
Entrepreneurship Electives:

| ACCT | 3070 | Federal Income Tax I | 3 |
| :--- | :--- | :--- | :--- |
| BISE | 3400 | Desktop Presentation Tools | 3 |
| BISI | 4400 | Introduction to Web Site Development | 3 |
| ECON | 3200 | Money and Banking | 3 |
| MGMT | 4050 | Organization Behavior | 3 |
| MGMT | 4060 | Special Topics in Management | 3 |
| MKTG | 4050 | Consumer Behavior | 3 |
| MKTG | 4150 | Promotional Management | 3 |

## General Business Minor

For the General Business minor, students need to select at least 18 hours of business courses which meet their objectives for taking the minor. If courses selected have prerequisites, these must be satisfied. Only juniors and seniors may enroll in 3000 or 4000 level business courses. ACCT 2010, ECON 2010, and MGMT 3010 should be included in all business minors.
General Business Minor Core (9 hours)

| ACCT | 2010 | Principles of Accounting I | 3 |
| :--- | :--- | :--- | :--- |
| ECON | 2010 | Principles of Economics I | 3 |
| MGMT | 3010 | Management and Organization Behavior | 3 |

General Business Electives (9 Hours)
Students should select 9 hours of business elective courses
that are consistent with their goals for the minor. Possible

Minors in Business
electives include the following:
BISE 31503
BISI 32303
MGMT 40303
MKTG 30103
MBA Foundation Courses
Eighteen hours of the following courses may also be used to constitute a business minor, and are useful in preparing students for a graduate business administration degree. For more information, see the graduate catalog of the school of your choice.

ACCT 2010/2020
FINA 3300
ECON 2010/2020
BISI 2150/3230
BLAW 3000
MGMT 3010
MKTG 3010
ECON 2040

| Accounting Principles | 6 |
| :--- | :--- |
| Business Finance | 3 |
| Economic Principles | 6 |
| Information Systems | 6 |
| Legal Environment | 3 |
| Mgt. \& Org. Behavior | 3 |
| Marketing Principles | 3 |
| Quantitative Methods | 3 |

## International Business

A minor is available in International Business. It is open to both business and non-business majors. This minor is designed to provide a broad interdisciplinary background of the cultural, social, economic, political, and business environment of the world. The purpose is to prepare more globally competent men and women to function productively in the world economy. The specific curriculum requirements are listed below:

1. Required Courses:

ECON 4100 International Economics 3
MGMT 4800 Internship/International 3
ECON 4600 Introduction to International 3 Business
2. Guided Electives (Choose 3)

MGMT 4120 International Business Management
MKTG 4350 International Marketing
FINA 4700 International Finance
ACCT 4250 International Accounting
ECON 4150 Economic Development
Economic Development
3. General Electives for Business Majors (Choose 1)

POLI 3600 Intro. to Comparative Govt. \& Politics
POLI 3930 Political Economy
POLI 3630 International Relations
3
4. Area Studies/Study Abroad (May be used to replace a guided elective/Consent of Advisor Needed) (3)
Total: 21
5. Other Requirements
a. All students with a minor in International Business are required to complete two years of college language studies. Students proficient in a foreign language may test out of this requirement through an exam arranged by the Department of Languages, Literature and Philosophy.
b. Only students with an overall GPA of 2.5 at the end of the sophomore year, as well as in ECON 2010ECON 2020 and ACCT 2010-2020, will be allowed to declare a minor in International Business.
c. All students are expected to meet the prerequisites for each course taken. Any exceptions, based on the background of any given student, must be approved in writing by an advisor in the Office of International Business Programs and a student's Department Chair.
d. Business majors may apply restricted and unrestricted business electives in the major area towards satisfying the International Business minor.

## Retention and Graduation

1. Business majors, who have completed 60 hours of course work, have a minimum cumulative GPA of at least a 2.0, and have completed the following Lower Division business core courses: ACCT 2010, ECON 2010, ECON 2040, and MGMT 1010, are eligible to take Upper division courses (3000/4000 level).
2. Administrative Withdrawal. A student may be administratively withdrawn from any College of Business course when the student is not eligible to be enrolled in the course.
3. At least 50 percent of the business credit hours for the business degree must be earned at Tennessee State University.
4. Transfer students should consult their Department Chair regarding core course requirements if they are transferring in business courses or to determine the acceptability of business courses earned at other institutions.
5. Up to 12 hours of approved upper division business credits may be used for degree purposes by students classified as undergraduate special students. However, all upper division business credits earned prior to becoming a special student count towards the 12 hour maximum. These students must meet prerequisites for the courses in which they wish to enroll.
6. A maximum of 36 total semester hours (lower division plus upper division credits) may be completed at TSU as a special student. All college course credits earned prior to becoming a special student count towards the 36 hour maximum. All course credits earned as a special student (up to the 36 hour maximum) may be counted upon becoming a degree seeking student.

## Credit Hours Required for Graduation:

Credit hours required for the Bachelor of Business Administration degree total a minimum of 120 semester hours for all College of Business majors and concentrations.

Degree Credit for Business Internship and Independent Study Courses
A maximum of six semester hours of credit earned in business internship and independent study courses (combined) may be applied to degree requirements. Approval of the appropriate Department Chair is required to enroll in College of Business internship and independent study courses. These courses are ACCT 4800, ACCT 4990, BISI 4800, BISI 4990, ECON 4910, ECON 4980, ECON 4990, FINA 4910, FINA 4980, INBU 4910, INBU 4980, MGMT 4800, MGMT 4810, MGMT 4990, MKTG 4990, and REUD 4490.

## Specific College of Business Graduation Requirements

1. Business majors must maintain an overall TSU cumulative GPA of at least 2.00 (not including remedial and developmental courses), a GPA of at least 2.00 in the lower division business core courses, a GPA of at least 2.00 in the upper division business core, and a GPA of at least 2.00 in the ten courses (30 hrs) being used to satisfy the major field plus upper division business elective course requirements.
2. All business majors, except Accounting, may not have more than two D's in the ten courses being used to satisfy the major. Accounting majors must have at least a C in all ten courses used to satisfy the major. D's and F's in additional (extra) elective courses beyond the 10 courses required for the major will not count toward determining whether the student is in violation of the 2-D policy.
3. At least 50 percent of the business credit hours required for the business degree must be earned at Tennessee State University; Business Strategy (MGMT 4500) should be taken at Tennessee State University during the final semester of enrollment.4. Graduation applications will be received only from students who have at least an overall 2.0 G.P.A.
4. All business majors are required to review degree requirements with the Office of Undergraduate Studies at least one full semester (before the end of the registration period) prior to the semester in which graduation is anticipated. Only students who are eligible will be permitted to remain enrolled in MGMT 4500 (Business Strategy). It is the responsibility of the student to schedule an appointment for his/her senior transcript review.
5. Business majors must complete 24 of their final 30 hours in residence at TSU.
6. Students are to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the College or University.

## Transfer of Credit Policy

1. The specific credit for work done at other institutions which will apply toward the BBA degree is determined by the Office of Admissions and Records and the appropriate Department Chair in the College of Business. Allowance of transfer credit by the Office of Admissions and Records does not necessarily mean that all of such credit will be applied toward the BBA degree.
2. The College of Business reserves the right to test the proficiency of any student in course work transferred from other colleges or universities and the right to disallow transfer credit in such course work if the student cannot demonstrate acceptable proficiency.
3. Courses transferred from community and junior colleges may only be used to meet 3000 and 4000 level business course requirements if they are approved as substitutions by the Department Chair and Dean or validated either by (1) the successful completion of an acceptable CLEP or DANTES examination or (2) the successful completion of a departmental examination. Students will be allowed to apply up to 18 credit hours of upper division business credit earned through a combination of approved substitution, CLEP, DANTES, and/or credit by exam for their upper division business course requirements. No more than 9 hours of the transferred course credit may be applied to fulfill the 30hour requirement in the business major or concentration area.
4. Transient Status: BBA students who wish to attend another institution as "transient" or "visiting" students to take upper division business courses for degree credit must get written approval in advance from their Department Chair. Approval is not automatic. MGMT 4500 (Business Strategy) must be taken at TSU.
5. Re-enrollment after Transferring Elsewhere: BBA students who enroll at another institution as regular students (as opposed to transient or visiting status) will be considered as having transferred to that institution. If such students later re-enroll in the BBA program they may be subject to the curricular degree requirements in effect at the time of their re-enrollment. Such students are encouraged to discuss their transfer to the other institution with their Department Chair in advance if they intend to apply this work towards the BBA degree at TSU.
6. The College of Business subscribes to the philosophy that a student's undergraduate program below the junior year should include no advanced, professional level courses. This philosophy is based on the conviction that the value derived from these advanced courses is materially enhanced when based upon a sound foundation.

Requirements for the BBA Degree - 120 Credit Hours Total

## Business Core:

The Business Core and the freshman and sophomore years are common for all students majoring in Accounting, Business Administration, Business Information Systems and Economics/Finance.

## General Education Requirements and Lower Division

 Business Core - 54 Credit HoursCOMM 2200 Public Speaking 3
ENGL 1010 and $1020 \quad$ Freshman English I and II 6

ENGL 2012-2322 English Literature 3
ENGL Lit. or Humanities Humanities 3
HIST 2010 and 2020 American History I and II 6
Humanities
MATH 1830*
UNIV 1000
NAT. SCIENCE w/LAB
Humanities
Basic Calculus 3
Orientation 1
Natural Science 8
Lower Division Business Core
MGMT $1010 \quad$ Introduction to Business 3
ACCT 2010-2020 Principles of Accounting I \& II 6
ECON 2010-2020 Principles of Economics I \& II 6
ECON 2040 Statistical Analysis 3
Upper Division Business Core - 27 Credit Hours
BISE 3150 Business Communications 3
BISI $3230 \quad 3$
BLAW 3000 Legal Environment of Business 3
ECON 3050 Quantitative Methods 3
FINA $3300 \quad 3$
MGMT 3010 Management and Organization Behavior 3
MGMT 3020 Operations Management 3
MKTG 3010 Basic Marketing 3
MGMT 4500** Business Strategy and Policy 3

## Major Requirements - 30 Credit Hours

All BBA students must complete a minimum of 30 hours of 3000/4000 level business courses to constitute their major as indicated on the following pages.

Elective Requirements - 9 Credit Hours
BISI 2150/Non-Business Elective ${ }^{* * *}$
MATH 1110/Non-Business Elective*
Non-Business Elective

* MATH 1110 is a prerequisite for MATH 1830 and can be used as a non-business elective
** MGMT 4500 may not be taken until all other business lower division and upper division core courses have been satisfactorily completed and should be taken during the final semester of enrollment.
*** Students testing out of BISI 2150 must take any 3 hour nonbusiness elective course.

Freshman and Sophomore Years
All Accounting, Business Information Systems, Business Administration, Economics, and Finance Majors

FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
ENGL 10103 ENGL 10203
UNIV 100011 COMM 22003
MGMT 10103
$\begin{array}{lll}\text { Natural Science } 4 & 4\end{array}$

| w/Lab* |  | w/Lab* |  |
| :---: | :---: | :---: | :---: |
| MATH 1110/Non- | 3 | BISI 2150/Non- | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL Lit/Humanities* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Department of Accounting

Eva Jermakowicz, Ph.D., CPA, Department Chair Avon Williams Campus, K-422
(615) 963-7162

Faculty: D. Dearman, E. Jermakowicz, L. Laska, T. Lechner, S. Shanklin

General Statement: The vision of the Department of Accounting is to achieve positive national recognition for our high-quality accounting programs. Consistent with the missions of Tennessee State University and the College of Business, the mission of the Department of Accounting is to prepare a diverse student body for careers in public, management, and government accounting.
Our curriculum is designed in order that our graduates will be:

- Knowledgeable in accounting and aware of the global business environment
- Critical thinkers and problem solvers
- Competent in technology
- Effective communicators and team members
- Aware of ethical ramification of business decisions

Our Accounting Program provides students with the opportunity to meet the educational requirements to sit for the CPA exam and to achieve other professional certifications.

## Major in Accounting

General Education Requirements: See College of Business General Education Requirements.
Accounting Major Core (24 hours)
ACCT 3110 Intermediate Accounting I 3
ACCT 3120 Intermediate Accounting II 3
ACCT 3140 Cost Accounting 3
ACCT 3070 Federal Income Tax I 3
ACCT 3200 Accounting Information Systems
ACCT 4010 Advanced Accounting 3
ACCT 4230 Auditing Theory 3
BLAW 3230 Business Law 3

## Accounting Major Electives (6 Hours)

Accounting majors must take 6 hours of guided accounting electives from the list below. Students should consult with the Accounting Faculty on all upper division electives.
Accounting Electives:
$\begin{array}{lll}\text { ACCT 4030 } & \text { Governmental/NFP Accounting } & 3 \\ \text { ACCT 4160 } & \text { Internal Auditing } & 3\end{array}$

ACCT 4170
ACCT 4190
ACCT 4220
ACCT 4240
ACCT 4250
ACCT 4800
ACCT 4990
ACCT 4991
ACCT 4950

Federal Income Tax II 3
Advanced Cost Accounting 3
Accounting Theory 3
Advanced Auditing 3
International Accounting 3
Accounting Internship 3
Independent Study
Independent Study
Accounting Topics 3

Major in Accounting
Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/NonBusiness Elective** | 3 | BISI 2150/NonBusiness Elective** | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL Literature/Hum.* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ACCT 3110 | 3 | ACCT 3120 | 3 |
| ACCT 3140 | 3 | MKTG 3010 | 3 |
| BISE 3150 | 3 | BISI 3230 | 3 |
| MGMT 3010 | 3 | BLAW 3000 | 3 |
| ACCT 3070 | 3 | MGMT 3020 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ACCT 4010 | 3 | ACCT 4230 | 3 |
| ACCT 3200 | 3 | BLAW 3230 | 3 |
| FINA 3300 | 3 | MGMT 4500 | 3 |
| ACCT Elective*** | 3 | ACCT Elective*** | 3 |
| ECON 3050 | 3 | Non-Business Elective | 3 |
|  | 15 |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.
*** Students should consult with an Accounting faculty advisor before selecting an accounting elective.


## Department of Business <br> Administration

Chunxing Fan, Ph.D., Department Chair
Avon Williams Campus, K-432
(615) 963-7993

Faculty: I. Addae, D. Baker, P. Flott, C. Hurst, J. Jolayemi, K. Kungu, X. Li, M. Lownes-Jackson, V. Lukosius, F. Olorunniwo, S. Thach, R. Unni

General Statement: Consistent with the missions of Tennessee State University and the College of Business, the mission of the Department of Business Administration is to
provide students with practical and innovative business education with well-grounded managerial skills and ethical awareness that differentiate them in the marketplace, advance their careers, and enable them to compete effectively in the world of business.

Business Administration Major: The curriculum in Business Administration provides students with general education requirements, and core requirements in the various disciplines of business. With such a strong background and versatility, opportunities are provided for students to choose from one of several concentrations: Supply Chain Management, Hospitality Management, Human Resource Management, Management, Marketing, and General Business.
Retention and Graduation: See College of Business section on Retention and Graduation.

## Major in Business Administration with Concentration in Supply Chain Management

General Education Requirements: See College of Business General Education Requirements

General Statement: The Supply Chain Management concentration is primarily concerned with the efficient coordination of the processes through which suppliers, factories, warehouses, distribution centers, and retail outlets produce and distribute items to the right customers, at the right time, and at the right price to minimize costs while satisfying a certain level of service. Our BBA degree with a concentration in Supply Chain Management (SCM) emphasizes the four important areas of: Sourcing (global strategic procurement, supply contract negotiation); Supply (production, quality management and service operations); Delivery (logistics, transportation, demand fulfillment); and E-business/ information systems (critical enabler of supply chain efficiencies and responsiveness). Supported by several Fortune 500 companies, up to 16 scholarships are awarded annually to graduate and undergraduate majors in Supply Chain Management.

| Supply Chain Management Core Courses (30 hours) |  |  |
| :--- | :--- | :---: |
| BISI 4150 | Database Systems | 3 |
| MGMT 3050 | Introduction to Supply <br> Chain Mgt. | 3 |
| MGMT 3040 | Business Decision <br> Modeling/Analysis | 3 |
| MGMT 3550 | ERP Systems |  |
| MGMT 4020 | Quality Management | 3 |
| MGMT 4250 | Leadership | 3 |
| MGMT 4600 | Supply Chain Strategy | 3 |
| MKTG 4300 | Procurement |  |
| MKTG 4400 | Logistics |  |
| Business | Elective |  |
| Choose one Course from: | 3 |  |
| MGMT | 3550 | ERP Systems |
| BISI | 4550 | Project Management |

Major in Business Administration with Concentration in Supply Chain Management - Suggested Four-Year Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science w/Lab* | 4 | Natural Science w/Lab* | 4 |
| MATH 1110/Non- | 3 | BISI 2150/Non- | 3 |
| Business Elective** | 3 | Business Elective** | 3 |
|  | 14 |  | 16 |



* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Major in Business Administration with Concentration in Hospitality Management

General Education Requirements: See College of Business General Education Requirements.

General Statement: The Hospitality Management concentration is specifically designed to prepare both full-time and part-time business students for management careers in the hospitality, and related sectors. The degree program provides the opportunity for students to build their entrepreneurial, managerial, functional, operational, and analytical capabilities to maximize their success in Hospitality Management related positions under a dynamic local, national, and global competitive environment.

Our program provides the skills needed to succeed in the exciting hospitality industry in positions such as: Hotel Management, Restaurant Management, Country Club Management, Convention/Event Planning, Corporate Travel Management and Catering Directors.

Hospitality Management Concentration (30-Hours)
HSMG 2000 Intro to Hospitality Management
HSMG 3500 Lodging Management
HSMG 3600 Restaurant \& Food Service Management
HSMG 3700 Management
HSMG 3800 Hospitality Marketing \&Sales Management
MGMT 4030 Human Resource Management
MGMT 4020 Quality Management
HSMG 4800 Internship
HSMG 4810 Internship
Plus two electives from: (6-Hours)
MKTG 4300 Procurement
MKTG 4050 Consumer Behavior
HSMG 4020 Building and Facility Management
HSMG 4200 Food/Beverage Controls
HSMG 4300 Revenue Management
MGMT 4250 Leadership
MGMT3030 Management of Service Organizations


| MGMT 4250 | Leadership | 3 |
| :--- | :--- | :--- |
| MGMT | Elective | 3 |
| Business | Electives | 6 |

## Business Electives

Major in Business Administration with Concentration in Management - Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/Non- | 3 | BISI 2150/Non- | 3 |
| Business |  | Business Electives** |  |
| Electives** ___ |  |  |  |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL Literature/ Humanities* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISE 3150 | 3 | BISI 3230 | 3 |
| BLAW 3000 | 3 | MGMT 3020 | 3 |
| ECON 3050 | 3 | MGMT 4030 | 3 |
| MGMT 3010 | 3 | MGMT 4050 | 3 |
| Business Elective | 3 | MKTG 3010 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| FINA 3300 | 3 | MGMT 3400 | 3 |
| MGMT 4020 | 3 | MGMT 4250 | 3 |
| MGMT 4120 | 3 | MGMT 4500 | 3 |
| MGMT 4190 | 3 | Business Elective | 3 |
| MGMT Elective | 3 | Non-Business Elective | 3 |
|  | 15 |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Major in Business Administration with a Concentration in Marketing

General Education Requirements: See College of Business General Education Requirements.

General Statement: Marketing includes all activities concerned with ascertaining and satisfying the needs and desires of individual and organizational buyers/consumers. It is consequently a function of prime importance in all forms of organizations. The marketing program is designed to facilitate both entry into marketing and long-term professional advancement. Emphasis is placed on marketing management.
Those who choose marketing as a career will be involved in product development and improvement, consumer research, pricing, promotion, sales, and distribution. Professional careers are open to marketing students in advertising firms, research organizations, retail organizations, retail and wholesale firms, and other service organizations, as well as a wide range of manufacturing, service, and non-profit groups devoted to supplying goods or services to meet the needs of the customer/buyer.

Marketing Concentration (30 Hours):
MKTG 3300 Applied Marketing Research 3
MKTG 4050 Consumer Behavior 3
MKTG 4250 Retailing Marketing 3
MKTG 4350 International Marketing 3
MKTG 4550 Marketing Strategy** 3
MKTG Electives 12
Business Elective 3
** Prerequisites for MKTG 4550 are: MKTG 4050 and MKTG 3300

Major in Business Administration with Concentration in Marketing - Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/NonBusiness Elective** | 3 | BISI 2150/NonBusiness Elective** | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL Literature/ Humanities* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISE 3150 | 3 | BLAW 3000 | 3 |
| BISI 3230 | 3 | FINA 3300 | 3 |
| ECON 3050 | 3 | MGMT 3020 | 3 |
| MGMT 3010 | 3 | MKTG 3300 | 3 |
| MKTG 3010 | 3 | MKTG Elective | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MKTG 4050 | 3 | MGMT 4500 | 3 |
| MKTG 4250 | 3 | MKTG 4350 | 3 |
| MKTG Elective | 3 | MKTG 4550 | 3 |
| MKTG Elective | 3 | MKTG Elective | 3 |
| Non-Business Elective | - 3 | Business Elective | 3 |
|  | 15 |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Major in Business Administration with Concentration in General Business

General Education Requirements: See College of Business General Education Requirements.

Concentration in General Business: This concentration is designed for students who prefer to acquire broad undergraduate training in business, rather than specializing in
a specific area. Opportunities for career advancements exist for experienced individuals with varied work exposures in all areas of business including-but not limited to- management, human resources, finance, economics, accounting and business information systems. Students choose courses that emphasize their specific work areas of interest in business or that correlate to their years of prior work experience before completing their degrees in General Business. Their educational preparation is flexibly designed to meet student's intended work emphasis.

General Education Requirements: See College of Business General Education Requirements

General Business Concentration Core (9 Hours)
MGMT 4030- Human Resource Mgt. (3)
Any two of the following: (6 Hours)
ACCT 3140 - Cost Accounting
ECON 4800 - Current Economic Problems
BISI 4400 - Introduction to Web Design
General Business Electives (21 Hours)

| MKTG Elective | 3 |
| :--- | :--- |
| Business Elective | 3 |
| Business Elective | 3 |
| Business Elective | 3 |
| Business Elective | 3 |
| Business Elective | 3 |
| Business Elective | 3 |


| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISE 3150 | 3 | BISI 3230 | 3 |
| BLAW 3000 | 3 | FINA 3300 | 3 |
| MGMT 3010 | 3 | MGMT 3020 | 3 |
| MKTG 3010 | 3 | Business Electives* | 3 |
| Business Elective | 3 | Conc. Core** | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MGMT 4030 | 3 | MGMT 4500 | 3 |
| Marketing Elective | 3 | Business Electives* | 6 |
| Business Electives* | 6 | Non-Business Electives | 6 |
| ECON 3050 | 3 | Conc. Core** | 3 |
|  | 15 |  | 18 |

*Students concentrating in General Business elect 18 hours of 3000/4000 level business courses according to their career objectives to constitute their major.
**One of following: ACCT 3140/ ECON 4800 / BISI 4400

## Department of Business Information Systems

Jeffrey S. Siekpe, PH.D., Department Chair
Avon Williams Campus, K-413
(615) 963-7132

Faculty: R. Guy, A. Kamssu, D. King, G. Marquis, J. Siekpe, S. Venkatraman

General Statement: The department of Business Information Systems, in support of the mission of the University and the College, is geared towards preparing students to have the skills, the competencies and the knowledge to use computer information systems and pursue professional careers in business and information technology.
Business Information Systems Major: 120 hours are required for the Business Information Systems-Industry Concentration and Business Information Systems e-Business Technology Concentration.

## Major in Business Information Systems with Concentration in Industry

In selecting non-business electives, the department highly recommends that BISI students consider, in consultation with their faculty advisor, programming language courses offered by the department of Computer Science. These courses will provide a strong background in programming, and also allow students to enroll in additional upper division computer science offerings. (Course prerequisites must be taken.)
Major in Business Information Systems with Concentration in
Industry - Suggested Four-Year Plan
FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
ENGL 10103 ENGL 10203
UNIV1000 1 COMM 2200 3
MGMT 10103 MATH 18303
Natural Science 4 Natural Science 4
w/Lab*
w/Lab*
BISI 2150/Non-
Buse*
Business Elective** $\frac{3}{14}$ Business Elective** $\quad \frac{3}{16}$
SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | $\begin{array}{l}\text { ENGL Literature/ } \\ \text { Humanities* }\end{array}$ | 3 |
|  |  | 3 | $\begin{array}{l}\text { Humanities* }\end{array}$ |
| $\begin{array}{lc}\text { ENGL Literature* } & \\ \text { HIST 2010 } & 3 \\ & \text { HIST 2020 }\end{array}$ | 3 |  |  |
|  |  |  | 3 |

FALL SEMESTER HR. SPRING SEMESTER HR.
BISI 31603
BISI $3230 \quad 3$ BISI 3360
BISE 31503 FINA 3300
BLAW 3000

| 3 | MKTG 3010 | 3 |
| :---: | :---: | :---: |
| 3 | ECON 3050 | 3 |
| 15 |  | 15 |

SENIOR YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
BISI $4150 \quad 3 \quad$ BISI 4230 3
BISI 4400
BISI 4360
3
MGMT 3020
MGMT 4500
BISI 4250
BISE/BISI Elective
BISI/BISE Elective Non-Business Elective

| 3 |
| :---: |
| 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.
BISI/BISE (Electives may be selected from the following list for the BISI-Industry Concentration.)
BISI $3500 \quad$ Data Mining
BISI 3610 Introduction to Relational Databases
BISI 3620 Relational Data Administration
BISI 4240
BISI 4260
End-User Computing Development
Training Strategies for BIS Professionals
Business Telecommunications
Network Security and Administration
Web Site Development
Project Management
Internship
Seminar in Information Systems
Independent Study
Desktop Presentation Tools
Information and Media Management
Administrative Office Management


## Major in Business Information Systems with Concentration in e-Business Technology

General Statement: The BBA-EB degree prepares students for a career in the rapidly growing field of e-Commerce and eBusiness. The degree program provides a solid business foundation upon which rigorous information technology competencies are built. The graduate of the program will possess the requisite management and technology skills required for positions in the e-Business and e-Commerce arena. The main objective of the Program is to develop students who understand the strategic and operational nature of e-Business, and are capable of developing dynamic, Webbased systems that provide a strategic and competitive advantage.

Required Courses ( 30 Hours):

| BISI 3160 | Business Application Development | 3 |
| :--- | :--- | :--- |
| BISI 3260 | Object-Oriented Programming | 3 |
| BISI 3360 | Applied Information Technology | 3 |
| BISI 4150 | Database Systems | 3 |
| BISI 4230 | Analysis, Design, and Implementation | 3 |
| BISI 4250 | Decision Support Systems | 3 |
| BISI 4360 | PC Networks | 3 |
| BISI 4400 | Introduction to Web Site Development | 3 |
| BISI 4410 | Web Site Development | 3 |
| MGMT/BISI | Business Elective | 3 |

Major in Business Information Systems with Concentration in e-Business Technology Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | . SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science |  | Natural Science |  |
| w/Lab* | 4 | w/Lab* | 4 |
| MATH 1110/Non- |  | BISI 2150/Non- |  |
| Business Elective** | * 3 | Business Elective** | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
|  |  | ENGL Literature/ |  |
| ECON 2040 | 3 | Humanities* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISI 3160 | 3 | BISI 3260 | 3 |
| BISI 3230 | 3 | BISE 3150 | 3 |
| BLAW 3000 | 3 | BISI 3360 | 3 |
| MGMT 3010 | 3 | MGMT 3020 | 3 |
| MKTG 3010 | 3 | ECON 2050 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. S | SPRING SEMESTER | HR. |
| BISI 4150 | 3 | BISI 4410 | 3 |
| BISI 4250 | 3 | BISI 4360 | 3 |
| BISI 4400 | 3 | BISI 4230 | 3 |
| FINA 3300 | 3 | MGMT 4500 | 3 |
| $\begin{aligned} & \text { MGMT 3500/MKTG } \\ & 3500 \end{aligned}$ | 3 N | Non-Business Elective | 3 |
|  |  |  |  |
|  | 15 |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


# Department of Economics and Finance 

Nelson Modeste, Ph.D., Department Chair Avon Williams Campus, K-417 (615) 963-7387

Faculty: C. Chen, D. Dhakal, S. Ghosh, M. Johnson, N. Modeste, W. Perry, A. Ray, and A. Wahid.

General Statement: The Department's mission is to provide an academically rigorous program in support of the College of Business mission of offering a high quality academic program. The Department of Economics and Finance offers a program of instruction for those who expect to pursue careers in economics, finance, international business, insurance, or government and provides service courses for business and non-business majors.

Retention and Graduation: See College of Business section on Retention and Graduation.

## Major in Economics and Finance with Concentration in Economics

General Statement: Concentration in Economics prepares students to analyze economic problems that all modern economies face. Students graduating with this concentration acquire rigorous analytical skill to relate and apply economic principles and theories to specific (micro) and general and broad (macro) economic conditions. Graduates with this concentration typically find jobs with various governmental agencies; go to graduate studies in economics, law and other areas of business.

Economics Concentration ( 30 Hours):

| ECON 3110 | Intermediate Microeconomic Theory | 3 |
| :--- | :--- | ---: |
| ECON 3120 | Intermediate Macroeconomic Theory | 3 |
| FINA 3600 | Investment Theory | 3 |
| FINA 4500 | Corporate Finance | 3 |
| ECON | Electives | 12 |
| FINA | Elective | 3 |
| Business | Elective | 3 |

Major in Economics and Finance with Concentration in Economics - Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/NonBusiness Elective** | 3 | BISI 2150/NonBusiness Elective** | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL | 3 |
|  |  | Literature/Humanities* |  |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |


| JUNIOR YEAR |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPR | RING SEMESTER | HR. |  |
| BISE 3150 | 3 | BISI | 3230 | 3 |  |
| ECON 3120 | 3 | ECO | N 3110 | 3 |  |
| FINA 3300 | 3 | ECO | N 3050 | 3 |  |
| MGMT 3010 | 3 | FINA | A 4500 | 3 |  |
| MKTG 3010 | 3 | MGI | MT 3020 | 3 |  |
| 1515 |  |  |  |  |  |
| SENIOR YEAR |  |  |  |  |  |
| FALL SEMESTER |  | HR. | SPRING SEME |  | HR. |
| BLAW 3000 |  | 3 | ECON Elective |  | 3 |
| ECON Elective |  | 3 | FINA Elective |  | 3 |
| ECON Elective |  | 3 | MGMT 4500 |  | 3 |
| FINA 3600 |  | 3 | Business Electiv |  | 3 |
| Non-Business Electiv |  | 3 | ECON Elective |  | 3 |
|  |  | 15 |  |  | 15 |

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Major in Economics and Finance with a Concentration in Finance

General Statement: A concentration in Finance prepares students to be financial analysts at the entry level. Students graduating with a Finance concentration acquire fundamental analytical skill in the area of finance and can apply those skills in day-to-day financial analysis in modern businesses. Students with a finance concentration are highly sought-after by the corporate world including the banking sector as well as various branches of the federal and state governments. Students with a finance concentration are better equipped to acquire professional certification such as CFA (Certified Financial Analyst) or a Certified Financial Planner (CFP).
Finance Concentration ( 30 Hours):

| ECON 3110 | Intermediate Microeconomic Theory | 3 |
| :--- | :--- | :--- |
| ECON 3120 | Intermediate Macroeconomic Theory | 3 |
| FINA 3400 | Finance Markets and Institutions | 3 |
| FINA 3600 | Investment Theory | 3 |
| FINA 4450 | Commercial Bank Management | 3 |
| FINA 4500 | Corporate Finance | 3 |
| FINA 4700 | International Finance | 3 |
| ECON or FINA | Elective | 3 |
| FINA Elective | Elective | 3 |
| Business | Elective | 3 |

Major in Economics and Finance with Concentration in Finance - Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/NonBusiness Elective** | 3 | BISI 2150/NonBusiness Elective** | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL | 3 |
|  |  | Literature/Humanities* |  |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISE 3150 | 3 | BISI 3230 | 3 |


| ECON 3050 | 3 | ECON 3110 | 3 |
| :--- | :---: | :--- | :---: |
| FINA 3300 | 3 | FINA 3400 | 3 |
| MGMT 3010 | 3 | FINA 4500 | 3 |
| MKTG 3010 | 3 | MGMT 3020 | 3 |
|  | 15 |  |  |

FALL SEMESTER HR. SPRING SEMESTER HR.
BLAW 30003 FINA Elective 3
ECON 31203 FINA 4450

FINA $3600 \quad 3$ MGMT 4500
FINA $4700 \quad 3$ Business Elective
3
Elective
ECON or FINA
15

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Major in Economics and Finance with a Concentration in International Business

General Statement: Students with an International Business concentration acquire a better sense of the global business environment. In particular this concentration prepares students to seek challenging opportunities that are available globally. By learning to speak another language, and/or being an intern in an international business, which is a requirement in this concentration, gives a clear advantage to students with this concentration, particularly in an ever changing global environment.

Finance Concentration ( 30 Hours):

| ACCT 4250 | International Accounting | 3 |
| :--- | :--- | :--- |
| BISI 3500 | Data Mining | 3 |
| ECON 4100 | International Economics | 3 |
| ECON 4150 | Economic Development | 3 |
| ECON 4600 | Introduction to Business Intelligence | 3 |
| ECON 4910 | Internship or Independent Study | 3 |
| or 4980 |  |  |
| FINA 4700 | International Finance | 3 |
| MGMT 4120 | International Business Management | 3 |
| MKTG 4350 | International Marketing | 3 |
| Business | Elective | 3 |

Major in Economics and Finance with Concentration in International Business Suggested Four-Year Plan

|  | FRES | EAR |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| UNIV1000 | 1 | COMM 2200 | 3 |
| MGMT 1010 | 3 | MATH 1830 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| w/Lab* |  | w/Lab* |  |
| MATH 1110/NonBusiness Elective** | 3 | BISI 2150/NonBusiness Elective** | 3 |
|  | 14 |  | 16 |
|  | SOPHO | MORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ACCT 2010 | 3 | ACCT 2020 | 3 |
| ECON 2010 | 3 | ECON 2020 | 3 |
| ECON 2040 | 3 | ENGL Literature/ Humanities* | 3 |
| ENGL Literature* | 3 | Humanities* | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 15 |  | 15 |
|  | JUN | OR YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| BISE 3150 | 3 | BISI 3230 | 3 |
| ECON 3050 | 3 | ECON 4100 | 3 |

FINA 3300

| 3 | MGMT 3020 | 3 |
| :---: | :---: | :---: |
| 3 | MGMT 4120 | 3 |
| 3 | MKTG 4350 | 3 |
| 15 |  | 15 |

MKTG 3010
15

## SENIOR YEAR

FALL SEMESTER
BISI 3500
BLAW 3000
HR. SPRING SEMESTER
3 ACCT 4250
FINA 4700
MGMT 4500
Business Elective
Non-Business
Elective
15
ECON 4600
INBU 4910 or INBU 4980

15

* These courses must be chosen from the University's approved list of general education courses.
** Students that do not have an equivalent course must take the listed course as a non-business elective.


## Course Descriptions

Please refer to the Graduate Catalog for graduate course listings. For degree and MBA admission requirements, contact the MBA Director, Avon Williams Campus, (615) 963-7121.

## Accounting (ACCT)

ACCT 2010: Accounting Principles I (Financial) (3). A study of the principles of financial accounting and reporting as they relate to today's business environment. Both the procedures used and the concepts upon which they are based are studied as well as ethical considerations. Prerequisite: MATH 1110.
ACCT 2020: Accounting Principles II (Managerial) (3). A study of managerial accounting information as it is used by managers in various types of business organizations. The emphasis is on the development, interpretation, and application of managerial accounting for planning activities, controlling operations, and making decisions. Prerequisite: ACCT 2010.

ACCT 3050: Financial Information for Entrepreneurial Ventures (3).Principles and procedures relating to financing small business ventures and uses of accounting information. Topics include accounting control systems, preparation and analysis of financial statements, traditional and non-traditional sources of financing, and budgeting. ACCT 3050 may not be used by accounting majors to satisfy a degree requirement. Prerequisite: ACCT 2020.
ACCT 3070: Federal Income Tax I (3).Principles of federal income taxation with particular attention to determining taxable income for individuals. Prerequisite: ACCT 2020.

ACCT 3110: Intermediate Accounting I (3).A study and application of Generally Accepted Accounting Principles (GAAP) for asset valuation, income measurement, and financial statement presentation for business organizations, and the processes through which these principles evolve. Emphasis is placed on the conceptual framework underlying financial accounting, expanded review of the accounting cycle, time value of money concepts and components of financial statements, such as cash and receivables, inventories, property, plant and equipment and intangible assets, financial instruments and liabilities. Prerequisite: ACCT 2020.

ACCT 3120: Intermediate Accounting II (3). This course represents a continuation of the intensive study and application of the generally accepted accounting principles for asset valuation, income measurement, and financial statement presentation begun in ACCT 3110. Emphasis is placed on accounting for stockholders' equity, investments, revenue recognition, income taxes, pensions, leases, and the statement of cash flows. Accounting changes and error analysis as well as full disclosure in financial reporting is discussed. Prerequisite: ACCT 3110.

ACCT 3140: Cost Accounting (3).The theory and practice of cost accounting with emphasis on its use for planning and control. Introduces the concept of cost control and profit planning, budgeting, standards, performance evaluation, and profitability analysis. Prerequisite: ACCT 2020.

ACCT 3200: Accounting Information Systems (3).Principles underlying the establishment of effective accounting systems in business enterprises. Basic concepts and problems in the consideration of accounting as an information system. Theoretical and pragmatic tools for analysis of accounting systems. Prerequisite: ACCT 2020.

ACCT 4010: Advanced Accounting (3). Provides theory and application of accounting principles to special accounting problems. Topics include partnerships, business combinations and consolidated financial statements, foreign currency transactions and foreign currency translation, nonprofit organizations, governmental entities, and other selected accounting topics. Prerequisite: ACCT 3120.
ACCT 4030: Governmental/NFP Accounting (3). Application of accounting concepts, theories, and conventions to recording and reporting of problems arising from public-sector accounting as applied to governments and to other non-corporate forms of organizations. Prerequisite: ACCT 3110.

ACCT 4160: Internal Auditing (3). Theory and principles of internal audit practice and procedures in accordance with Standards for the Professional Practice of Internal Auditing. The course includes a study of the development of the profession, techniques, purpose, objectives, and administration of internal auditing. Audit reports furnishing management with analyses, appraisals, recommendations, counsel, and information concerning activities review are also covered. Prerequisite: ACCT 3200.
ACCT 4170: Federal Income Tax II (3).Principles of entity taxation (corporations, partnerships, estates, and etc.) Prerequisite: ACCT 3070.

ACCT 4190 Advanced Cost Accounting (3). Advanced managerial accounting concepts, techniques for decision making, capital budgeting, transfer pricing, decision models, inventory management, behavioral accounting, inventory systems and yield/mix models of profit maximization. Prerequisite: ACCT 3140.

ACCT 4220: Accounting Theory (3).A study of propositions, axioms, theories, controversial accounting concepts, authoritative statements, research studies of professional organizations, and professional problems. Critical evaluation of concepts, assumptions, principles, and analytical methodologies of accounting and their application to factual situations. Prerequisite: ACCT 3120.
ACCT 4230: Auditing Theory (3). The fundamental principles of auditing. Emphasis is placed on theory and principles of audit practice and procedures in accordance with generally accepted auditing standards, the auditor's professional code of ethics, the legal liability of the auditor, audit reports, and the role of internal control. Prerequisites: ACCT 3200 and ACCT 3110.
ACCT 4240: Advanced Auditing (3). Application of audit theory and principles, generally accepted auditing standards and generally accepted accounting principles to actual documented audit situations through the case study method. Written analysis of cases is required. Completion of a computerized practice set emphasizing preparation and documentation of working papers is also required. Prerequisite: ACCT 4230.
ACCT 4250: International Accounting (3). The course focuses on global accounting convergence issues and differences between International Financial Reporting Standards (IFRS) and U.S. Generally Accepted Accounting Standards (GAAP).

ACCT 4800: Accounting Internship (3). Internships are designed to provide accounting students supervised practical learning experiences in public, industry, governmental, or not-for-profit entities. Work experience enhances theory and classroom studies. Student activity and progress must be monitored and evaluated by an assigned senior department faculty. Prerequisites: Consent of Department Chair.
ACCT 4950: Accounting Topics (1-3). Provide the opportunity for outstanding accounting students to explore, update, and expand the core knowledge of accounting theory, financial, managerial, auditing, taxation, and business law using professional problems. Prerequisite: Consent of instructor:

ACCT 4990: Independent Study (3).Research and reading which allows outstanding accounting students to investigate, in depth, approved accounting topics of the student's major area of interest. Studies will be coordinated by Department Chair and a senior department faculty member. Prerequisite: Consent of Department Chair.

ACCT 4991: Independent Study (3).A course which allows outstanding accounting students to investigate, in depth, approved accounting topics of the student's choice. Studies will be coordinated by Department Chair and a senior department faculty member. Prerequisite: Consent of Department Chair.

## Business Information Systems (BISI)

BISI 2150: Microcomputer Applications (3). This course is designed to give students hands-on experience to microcomputer applications
(word processing, spreadsheet, database, and other business applications including the Internet). All applications software utilized are windows based. Therefore, an introduction to the Windows platform as well as a brief overview of microcomputer concepts is included as components of this course. This course can be used to satisfy a microcomputer applications proficiency requirement at most four-year institutions.

BISI 3160: Business Application Development (3). This course is targeted to the student who has no or very little programming knowledge and experience. The goal of this course is to get the student get prepared for the more advanced programming courses. Students will understand the nature of programming as human activity, learn and experience main components of programming process, understand main control structures of procedural and objectoriented programming languages, learn and be able to use major programming logic tools to design a program. The course will provide hands-on demonstration of program design using selected procedural and objected-oriented languages.

BISI 3230: Management Information Systems (3). This course will introduce the topic of information systems (IS) and discuss how organizations use information systems to support a variety of tasks ranging from basic day-to-day activities to creating competitive advantage in the market place. The course follows an overview of the types of information systems, basic IS hardware and software, computer networks, the impacts of IS on organizations and society, ethical use of information systems, and how to analyze and design information systems. The broad topic coverage in this course is to provide the necessary foundation to understand the ever increasing relationship between information systems, organizations, and society in general. Throughout the semester, students will be given hands-on assignments to review their understanding of applying microcomputer applications to solving business problems.

BISI 3260: Object-Oriented Programming (3).Provides an introduction to programming in the business environment using the dot net framework. Students will create user interfaces by selection and placement of objects on the user screen, set priorities on those objects, refine their appearance and behavior, and write code procedures to react to events that occur in the user interface. Prerequisite: BISI 2150.

BISI 3360: Applied Information Technology (3). This course provides an introduction to computer hardware and system software in the context of a microcomputer. The course will include a hands-on approach to hardware/software installation and configuration, troubleshooting, and introduction to computer networking. Prerequisite: BISI 2150.

BISI 3500: Data Mining (3). This course will cover both the predictive and descriptive models of analysis to discover patterns and relationships in sets of data. The total knowledge discovery process will be examined including; identification of the problem to be solved, collection and preparation of data, deploying the models, and interpreting and monitoring results.

BISI 3610: Introduction to Relational Databases (3). This course provides an introduction to the design, organization, and use of a relational database.

BISI 3620: Relational Data Administration (3). This course includes topics on database administration. Specifics include the creation of database objects, backup and recovery, and performance monitoring. Prerequisite: BISI 3610.

BISI 4150: Database Systems (3).Study of data concepts, planning, database management, database design, current trends, and commercial products. Topics included are: Database models, Structured Query Language (SQL), Entity-Relationship Modeling (ER ), and normalization. Students will develop a single-user database system. Prerequisite: BISI 3230 (or Consent of the Instructor).

BISI 4230: Analysis, Design, and Implementation (3).Use of information systems techniques to solve managerial and organizational problems of limited complexity. The course includes discussion of various System Development Life Cycles. Students will use a SDLC approach for the analysis and design of a semester long project. Prerequisite: BISI 4150.

BISI 4240: End-User Computing Development (3). This course addresses the links between information technology, people, and organizational goals as well as project management from the information systems perspective. The course also features an enduser approach to project management by providing a comprehensive, practical, up-to-date treatment of information technology evaluation, selection, acquisition, and management. Business process is reviewed with emphasis given to strategies of deploying the technology into the workplace. Prerequisite: BISI 3230.

BISI 4250: Decision Support Systems (3). Key technical and managerial issues in the development and use of decision support systems in organizations are addressed. Strategic management decision making and the role of DSS in the process are explored. Contemporary topics including Expert Systems, Executive Information Systems, data warehousing, data visualization, and Group Decision Support Systems are reviewed. Prerequisite: BISI 3230.

BISI 4260: Training Strategies for BIS Professionals (3).Designed to provide BIS undergraduate student exposure to training and development theory as it relates to the adult learner. The role of the technical trainer in providing information systems concepts will be investigated. Needs analysis and methods for developing appropriate training as a practitioner are investigated. Prerequisite: BISI 3230.

BISI 4300: Business Telecommunications (3).Provides a broad overview of the telecommunications field as well as the implications for business and industry. Prerequisite: BISI 3230.
BISI 4360: PC Networks (3).Principles and specific implementation of a local area network system; including predominant networking product methodologies. Includes extensive network administration exercises. Prerequisite: BISI 3230.

BISI 4364: Network Security and Administration (3).This course provides the student with an introduction to network and information security. The student will learn basic terminology and concepts of security and apply them to computer networks. Specific topics will include security policy and procedures, computer networks, user authentication and authorization, encryption, computer crime, network attacks and network protection. Prerequisite: BISI 4360.

BISI 4400: Introduction to Web Site Development (3). This class is designed to give the student the knowledge and skills to build creative, interactive, and well-designed web sites. The intention is to balance technical skills with artistic skills to create web pages that are conceptually interesting, easily navigable, visually pleasing, and functional. The focus is on client side webpage processing. Before employing a Web authoring tool, students are first introduced to the use of Notepad to learn basic html elements. Topics in this course include broad overview of the Internet and the World Wide Web, html, cascading style sheets, and JavaScript.

BISI 4410: Web Site Development (3). This is the capstone course in the E-business curriculum. This course covers the design and implementation of a Web site similar to one used by an E-Commerce Business. This course emphasizes dynamic content driven web development using database concepts. The course covers both clientside and server-side programming. Prerequisites: BISI 4400 and BISI 4150.

BISI 4550: Project Management (3). This course is an introduction to the project management process, with special emphasis on its life cycle, the organizations that are involved in it, and the tools used in managing and delivering projects. The course takes a holistic, integrated approach to management of projects; exploring both technical and managerial challenges. It emphasizes not only individual project execution, but also provides a strategic perspective, demonstrating means to manage projects at the program and portfolio levels. Overall, the course strikes a balance by using cases, examples, and problems from a variety of project types, including IT examples, construction, engineering, manufacturing, new product development, R\&D, and services.

BISI 4800: Internship (3).Designed to provide BIS students the opportunity to obtain supervised information systems related-work experience. Theory and reading assignments complement work experience. Student activity and progress must be monitored, evaluated, and graded by an assigned full-time BIS faculty member. Prerequisites: Consent of Department Chair and full admission to the Upper Division.
BISI 4810/4820: Seminar in Information Systems (3/3). Provides an indepth study of current BIS topics. Extensive readings/research on current information system developments are reviewed and discussed. Prerequisites: BISI 4150 and Consent of Department Chair.

BISI 4900: Practicum (3). Provides the senior BIS student an opportunity to gain hands-on experience in assisting users in resolving user/systems software related problems. Prerequisites: BISI 3230 and Consent of Department Chair.

BISI 4990: Independent Study in BIS (3).Provides the outstanding student the opportunity to investigate in-depth, an approved information systems topic. A senior faculty member of the department will coordinate the work of each individual student. Prerequisites: BISI 3230 and Consent of the Department Chair.

## Business Information Systems Education (BISE)

BISE 3150: Business Communications (3). This course encompasses the study of principles, practices, and mechanics of writing in modern business as well as critical thinking and analytical skills that focus on report organization and presentations, problem solving, and argument building. Students will utilize technology in demonstrating presentation and organization skills associated with oral and written communications in a business environment.

BISE 3350 Business Research \& Report Writing (3). Designed to help students develop a clear, concise, and correct research writing style; to help students collect, analyze, organize, interpret, and present business data in MLA style. Prerequisite: BISE 3150.

BISE 3400: Desktop Presentation Tools (3). This course is an introduction to concepts and methods of electronic (desktop) publishing that prepares students to design page layouts for packaging, publications, marketing communications and interactive multimedia. Features essential to multimedia presentations are integrated with techniques for capturing and editing photos to produce business publications. Students will develop skills and knowledge in industry standard computer software to produce multipurpose visual communications. Prerequisite: BISI 2150.

BISE 4000: Information and Media Management (3).Provides a detailed treatment of information and media management. Media is defined as the information storage format, and includes paper, microrecords, electronic, video, and other forms of information generation, recording, and storage. Students will develop an understanding of the information life cycle, information value, and how information serves as a critical organizational asset. Legal and ethical issues, information resource management, and varying cultural conventions governing information management are presented. Prerequisite: BISI 2150.

BISE 4300: Administrative Office Management (3).Designed to help students develop an understanding of the complexities associated with systems, methods, and procedures for efficient office management. Prerequisite: BISI 2150.

## Business Law (BLAW)

BLAW 3000: Legal and Ethical Environment of Business (3).A study of the legal and ethical aspects of the business environment and the legal rights and liabilities of business persons. Includes the development and nature of the legal system; alternate dispute resolution; business and the Constitution; torts; business crimes; antitrust; administrative law; employment discrimination; securities regulations and international law. Ethical topics include deontology, teleology, social contract theory, codes of ethics, and influence of the group.

BLAW 3230: Business Law (3).A study of the legal rights and potential liabilities of business persons, including an introduction to the nature of the legal system and the basic law of contracts. Uniform Commercial Code, sales, secured transactions, and bankruptcy. Prerequisite: BLAW 3000.

BLAW 3240: Business Law II (3). A study of the legal rights and potential liabilities of business persons, including the basic legal principles of agency, partnerships, corporations and securities, personal property and bailment, real property and environmental controls, U.C.C. and commercial paper. Prerequisite: BLAW 3000

## Economics (ECON)

ECON 2010: Principles of Economics I (3).Methodology of economics, fundamentals of macroeconomics, fiscal policy, and fundamentals of monetary policy, global issues. Prerequisite: Math 1110.

ECON 2020: Principles of Economics II (3).Economic growth and microeconomics, some domestic and international applications, market structure, role of pricing mechanism environmental issues. Prerequisite: ECON 2010.

ECON 2040: Introduction to Statistical Analysis I (3). Elementary statistical techniques with emphasis on applications to business problems. Topics covered include descriptive statistics, probability, random variation, probability distributions, and statistical inference, hypothesis testing. Prerequisite: Math 1110.

ECON 3000: Mathematical Economics. (3). An introduction to quantitative methods of the management scientist with applications to economic and industrial problems. The course is designed to introduce the student to the use of mathematics, statistics, economics, and accounting as tools in management decision making. Prerequisites: ECON 2040 and ECON 2020.

ECON 3020: Basic Econometrics (3).Classical linear regression
model, Gauss-Markov theorem, its assumptions, detection, consequences, and correction of heteroscadasticity, multicollinearity, autocorrelation. Prerequisite: ECON 2040.
ECON 3050: Introduction to statistical Analysis II (3).A continuation of ECON 2040. Topics covered include: linear regression and correlation, multiple regression, the analysis of variance, elements of time series analysis, forecasting models, and survey sampling, linear programming, other decision theoretic applications. Prerequisite: ECON 2040.

ECON 3110: Intermediate Microeconomic Theory (3).The price system and allocation of resources; economic analysis of demand and production. Prerequisite: ECON 2020.
ECON 3120: Intermediate Macroeconomic Theory (3).Aggregate demand, aggregate supply, and equilibrium level of employment; the price level, inflation, and deflation. Prerequisite: ECON 2020.

ECON 3200: Money and Banking (3). Nature and functions of money; analysis of monetary systems; money creating role of commercial banks and the Federal Reserve System; determinants of money supply and demand; monetary theory and policy. Prerequisite: ECON 2020.

ECON 3300: Principles of Labor Economics (3).A study of the labor market; American labor movement; union history, structure and philosophy; labor problem analysis; industrial disputes and labor legislation. Prerequisite: ECON 2020.
ECON 4100 International Economics (3).Introduction to the tools and techniques of international economic analysis concerning the basic theory of free trade, tariffs, and commercial policy as well as international monetary analysis. Prerequisite: ECON 2020.

ECON 4150: Economic Development (3).A basic study of the general nature of the economic development problem, some simple theories of economic growth and underdevelopment, as well as development policies. Prerequisite: ECON 2020.

ECON 4520: Urban Economics (3).Urban history, location theory, city growth, and urban problems. Prerequisite: ECON 2020.

ECON 4600: Introduction to Business Intelligence (3). This course surveys various topics related to corporate and national states' needs to gain, protect, and use information for strategic purposes. Economic, financial, technological, legal, and political issues are addressed. Prerequisites: ACCT 2020, ECON 2020 or consent of the instructor.
ECON 4700: Managerial Economics (3). Application of economic theory to business decision making, emphasis on profit objectives, measurement and forecasting demand, and costs and capital budgeting. Prerequisite: ECON 2020.

ECON 4800: Current Economic Problems (3).Examination of key economic issues. Such major objectives as economic progress and economic justice provide a general framework for analyzing economic growth, inflation, unemployment, public debt, income maintenance, agriculture, and international economic affairs. Prerequisite: ECON 2020.

ECON 4910: Internship (3).Internships are designed to provide Economics students supervised practical learning experiences in government, business or industry. On the job experiences enhance the theoretical knowledge received in the classroom studies. Student activity and progress must be monitored and evaluated by an assigned faculty member. Prerequisites: Approved by the Department Chair and full admission to the College of Business.

ECON 4980-4990: Independent Study (3, 3). A course which allows outstanding students to investigate in depth approved topics of the student's choice. Individual studies are coordinated by a senior member of the departmental faculty. Prerequisites: ECON 3110, ECON 3120.

## Finance (FINA)

FINA 3045: Personal Finance (3): Planning personal finances; managing personal finances; making purchasing decisions; insuring personal resources; investing financial resources; and controlling one's financial future. Prerequisite: None

FINA 3300: Business Finance (3). Financial goals, ratios, sources and uses of funds, asset management, capital budgeting, leverage, cost of capital, dividend policy, valuation, mergers and reorganizations and financial performance evaluation. Prerequisite: AC 2020.

FINA 3400: Finance Markets and Institutions (3).Operating characteristics, regulation, flows of funds, intermediation, major sectors of money and capital markets and the institutions operating therein. Prerequisite: FINA 3300.

FINA 3600: Investment Theory (3). Theory of investment value, investment media and strategies, risk returns, price behavior, investment techniques and portfolios, Prerequisite: FINA 3300.

FINA 4450: Commercial Bank Management (3).Organization, administration of commercial banks, balance sheet management, loans and investments. Prerequisite: FINA 3300.

FINA 4500: Corporate Finance (3).Optimizing sources and uses of funds, corporate asset and financial structure management and strategies and sophisticated techniques of analysis. Prerequisite: FINA 3300.

FINA 4550: Corporate Assets Management (3). Advance level exposure to valuation concept, capital budgeting decisions, working capital management, merger and acquisitions. Prerequisite: FINA 3300.

FINA 4600: Security Analysis and Portfolio Management (3). Fundamental and technical techniques analysis, security valuation, capital asset pricing model, portfolio analysis and management, advanced models, theories, and techniques of analysis. Prerequisite: FINA 3600.

FINA 4700: International Finance (3). Problems in international finance; the balance of international payments; financing international trade; foreign departments of banks; foreign exchange markets; and the impact of international financial problems on business. Prerequisite: FINA 3300.
FINA 4910: Internship (3).Internships are designed to provide Finance students supervised practical learning experiences in government, business or industry. On the job experiences enhance the theoretical knowledge received in the classroom studies. Student activity and progress must be monitored and evaluated by an assigned faculty member. Prerequisites: Approved by the Department Chair and full admission to the College of Business.

FINA 4980: Independent Study (3). A course which allows outstanding Finance students to investigate in depth approved finance topics of the student's choice. Studies are coordinated by departmental faculty. Prerequisites: Consent of the Department Chair.

## International Business (INBU)

INBU 4980: Independent Study (3). A course which allows outstanding students to investigate in depth approved International Business topics of the student's choice. Studies are coordinated by departmental faculty. Prerequisites: Consent of the Department Chair.
INBU 4910: Internship (3).Internships are designed to provide International Business students supervised practical learning experiences in government, business or industry. On the job experiences enhance the theoretical knowledge received in the classroom studies. Student activity and progress must be monitored and evaluated by an assigned faculty member. Prerequisites: Approved by the Department Chair and full admission to the College of Business.

## Hospitality Management (HSMG)

HSMG 2000: Introduction to Hospitality Management (3). This course provides an introduction to the different segments, disciplines, and potential career opportunities in the hospitality industry. Trends in the hospitality industry would be examined. Industry leaders would be featured as guest speakers.

HSMG 3500: Lodging Management (3). This course explores the managerial techniques, conditions, environment, problems, trends and issues inherent in the management of all types of lodging properties. Study of lodging facilities and the services provided throughout the guest cycle. Included are the analysis of front desk operations, front office management, marketing, reservations, data processing, guest services, security, executive housekeeping, and night auditing. A wide-ranging number of field trips to area properties are required for this course. Prerequisite: MGMT 3010

HSMG 3600: Restaurant \& Food Service Management (3). Identifies the principles and crucial elements involved in the successful operation of restaurant and food service. Students are guided through the process of creating a concept, developing a menu, budgeting and controlling costs, staffing the restaurant and food service, purchasing food and equipment, bar and beverage management, daily operations
and developing a marketing plan. Prerequisite: MGMT 3010, MKTG 3010

HSMG 3700: Events Management (3). This course is an exploration of the meeting and convention segment of the hospitality and tourism industry and centers on both the public and private sectors including convention and meeting centers, single and multi-purpose arenas, sport stadiums, convention bureaus and the meeting planning industry. Areas explored include planning, coordinating and managing small, medium and large group meetings, seminars, conventions, trade shows, exhibitions, sport, stage and music events, political assemblies and other special events. A key component of the course is the operational detailing required for each activity from first contact through to follow-up after the event. Prerequisite: MGMT 3010.

HSMG 3800: Hospitality Marketing and Sales Management (3). A sales-oriented course focusing on the sales process as it relates to the hospitality and events management industry. Particular attention is directed at developing a promotional plan, programs, and materials in the hospitality and events management industry and its industry segments. Students will also be introduced to concepts in revenue management. Prerequisite: MKTG 3010

HSMG 4020: Building and Facilities Management (3). A study of the interactive environmental systems that comprise a property's physical plant. Particular attention focuses upon electrical, mechanical, fluids, maintenance, engineering, security systems, fire prevention, emergency systems, safety and health protection, budget analysis, trade practices, government regulations and energy utilization and conservation. Students will be introduced to various computer software programs to control and regulate the physical plant. Prerequisite: MGMT 3020.

HSMG 4200: Food/Beverage Controls (3). This course focuse on principles of effective food, beverage and labor control system. Topics will include food safety; federal, state and local regulations and legal issues; standard determination, budget, menu pricing, cost-volumeprofit analysis, and relevant computer applications. Prerequisite: HSMG 3600.

HSMG 4300: Revenue Management (3). An examination of the basic principles and concepts of revenue management. This course will focus upon dynamic pricing, forecasting, capacity management, discounting, displacement analysis and rate management. Students will learn about relevant tools and techniques in the hospitality industry. Prerequisite: MKTG 3010

HSMG 4800: Internship Practicum - I (3). This practicum is required to be completed before or during the first semester of the senior year, to satisfy the required 300 of the 600 hours of supervised employment in a hospitality firm. Students will be attached to a firm for employment at an industry properly approved in advance by the course instructor, faculty advisor and program Department Chair. The course exposes the student to the hospitality industry and allows hands-on experience under industry supervision. Weekly Internet conferences with the course instructor and a comprehensive internship report are mandatory.
HSMG 4810: Internship Practicum - II (3). This three credit course satisfies 300 hours of the total of 600 hours of supervised employment at a hospitality or events management organization approved in advance by the course instructor, faculty advisor and program Department Chair and must be satisfied prior to enrolling as a, or during the second semester senior year. Weekly Internet conferences with the course instructor and a comprehensive internship report are mandatory. Prerequisite.: HSMG 4800.

## Management (MGMT)

MGMT 1010:Introduction to Business (3). The structure of American business; survey of the fundamental principles of business organizations; exploration of career opportunities and professionalism in business (For freshman business students and students in other fields).

MGMT 2900:Current Topics in Management (3). Explores selected areas of management, including global issues. Prerequisite: MGMT 1010 (or equivalent) or approval of the instructor.

MGMT 3010: Management and Organization Behavior (3). Effective management is a key success factor in commerce. This course focuses on the principles of managing both organizations and employees in today's global environment. Course topics range from planning for effectiveness to the implementation of the plans, and include: organization goals, organization structure, motivation, leadership, communication, group dynamics, ethics, and managing change. Prerequisite: At least Junior standing.

MGMT 3020: Operations Management (3).An overview of the basic principles, concepts, and analytical tools involved in the design, operation, and control of operations that create goods and services, with an emphasis on the efficient use of resources. Prerequisites: Junior Standing, ECON 2040.

MGMT 3030: Management of Service Organizations (3).Decision making in service operations such as health care delivery, food/restaurant, hotel/motel, banking and finance, transportation, leisure, and government. Both conceptual framework and application of management techniques to problems peculiar to service organizations. Prerequisite: ECON 2040.

MGMT 3040: Business Decision Modeling and Analysis (3).(Formerly Introduction to Management Science).Application of decision analysis tools in business decision making, especially in supply chain collaboration environment. Topical application areas will be drawn from all areas of business, industry, and government, including: accounting, finance, information system, investment portfolio analysis, human resources management, production of goods and services in manufacturing and service operations, quality management, and supply chain management. Prerequisites: ECON 2040.

MGMT 3200: Entrepreneurship-New Venture Creation and Management (3). Managerial and business theory functions and processes applied to small business. Emphasis will be given to problems and practices peculiar to the establishment and operation of small business enterprises. Opportunities, hazards, strategies, and objectives will be analyzed from broad managerial and specific functional aspects. Case studies, research, selected presentation by small business owners and other teaching methodologies will be used. Prerequisites: Senior standing, completion of core junior level business courses, and MGMT 3010.

MGMT 3240-3250: Business Consulting and Entrepreneurship I and II $(3,3) . O p p o r t u n i t i e s ~ f o r ~ c o n s u l t i n g ~ w i t h ~ s m a l l ~ b u s i n e s s ~ o r ~ g e n e r a t i n g ~$ prospects and plans for new enterprises. Provides experience that extends and solidifies what is learned in the classroom and allows students trial and error experiences in a relatively protected environment. Lectures and discussion, but emphasis on problem solution by the student. Prerequisites: Approval of instructor, MGMT 3010, and MGMT 3200. (MGMT 3240 is prerequisite to MGMT 3250).

MGMT 3400: Business Ethics (3). Consideration of ethical, legal, and human relations dimensions in the business and nonprofit environments. Prerequisite: MKTG 3010.

MGMT 3500: E-Business Models (3). A survey of the dynamic business issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. Included is an overview of internet development and security. Leveraging new technologies to enhance business processes, unique characteristics of e-marketing, and the legal, ethical, and regulatory issues in conducting e-business. Prerequisite: MKTG 3010. Cross-listed with MKTG 3500.

MGMT 3550: Enterprise Resource Planning (ERP) Systems (3).Planning and control systems for product and service flows in the supply chain. . Extended ERP- the management of inter-enterprise business processes like Customer Relationship Management and Supply Chain Management as well as analytical applications. Integration of management, sales, marketing, finance, operations, ebusiness technology to create a true customer-focused strategy in Business-to-Business (B2B) and Business-to-Consumer (B2C) markets. Prerequisite: MGMT 3050; or MGMT 3020 may be taken as a pre-requisite or concurrently.

MGMT 4020 Quality Management (3). An integrated study of quality issues in the entire supply chain. The course will emphasize the continuous improvement of business processes, as well as the design, establishment, evaluation, and improvement of quality systems in the supply chain. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MKTG 4020 Prerequisite: MGMT 3010.

MGMT 4030: Human Resource Management (3).This course surveys the topics that form the foundation for human resource management. The primary topics included in this course are; HR's role in organizations, job analysis, job design, managing a diverse workforce, human resource information systems (HRIS) and employment law. An overview of the following HR processes will be included; acquiring a workforce, developing and evaluating the workforce, determining pay and rewards, and strategic HR issues. Prerequisite: Tentative or Full Admission to the College of Business, or permission of the Department.

MGMT 4040: Organization Theory (3).Theoretical foundations for the study and analysis of organizations including theory development and important research findings. Examines aspects of various systems
and behavior. Emphasis will be on the dynamics, efficiency and effectiveness of organizational systems. Prerequisite: MGMT 3010.
MGMT 4050: Organization Behavior (3). Theoretical foundations for the study and analysis of human behavior in complex social organizations and of related managerial problems and challenges. A study of management and behavioral science concepts. Techniques and research as applied toward increasing human productivity and individual and group satisfaction in organizational settings. Prerequisite: MGMT 3010.

MGMT 4060: Special Topics in Management (3). (Formerly MG 406) Research into selected areas of management. Prerequisites: MGMT 3010 or approval of the instructor.
MGMT 4070:Training and Development (3). (Formerly Industrial Relations) This course covers the process of training and development, career planning and measuring HR outcomes.
Coaching, facilitating and training will be examined in the context of adult learning. Types of learning, learning theories and self directed learning will be explored. Career planning in the context of emerging organizational forms will be presented. Prerequisite: MGMT 3010.

MGMT 4100:Performance and Compensation Administration (3).(Formerly Compensation Administration). This course includes the following compensation and rewards topics: performance evaluation, rewards beyond compensation, internal and external equity, labor relations (impact on total rewards) and performance management. Included is an analysis of both private and public benefits; pensions, unemployment insurance, worker's compensation. Prerequisite: MGMT 4030.

MGMT 4110:Recruitment and Selection (3).(Formerly Operative Supervision). This course addresses the topics of workforce planning, recruitment, selection, organizational entry, and socialization. The impact of mergers and acquisitions on the workforce is also examined. Prerequisite: MGMT 3010.

MGMT 4120: International Business Management (3).Analysis of managerial and business theory functions and processes practiced by multinational firms. A study of the products and services, strategies, objectives, policies and organizational structures of enterprises operating in various social, economical, political, and cultural environments. Cases, research, and other teaching methodologies will be employed. Prerequisites: Senior Standing and MGMT 3010.

MGMT 4170: Seminar-Contemporary Management Innovations and Entrepreneurship (3). This course examines selected contemporary topics, management innovations, controversial issues and problem areas related to management and entrepreneurship in a global business environment. Research and review of key creative managerial innovations that revitalize dying enterprises, create new enterprises, greatly enhance products, service, profitability and growth. Prerequisites: MGMT 3010 and Senior Standing.
MGMT 4190:Employment Law and Labor Relations (3).(Formerly Collective Bargaining. Analysis of collective bargaining processes, procedures, and legislation in private and public sector organizations. Review of current and future implications for management. Labor relations, federal legislation, and the collective bargaining process; case studies and arbitration cases in public and private sectors; impact of collective bargaining on the economy, union management problems and opportunities in both the public and private sector. Prerequisite: MGMT 3010.

MGMT 4250: Leadership (3 hrs). This course is a broad survey of theories of leadership with primary focus on contemporary models and the specific contexts within which leadership behaviors occur. It will examine the different mix of personal, interpersonal, technical, and conceptual skills and competencies required of leaders (a) at the supervisory, managerial, and executive levels, (b) within different organizational frameworks such as industry, academia, governmental, non-profit, and the military, and (c) within the context of the rapidly changing 21st century political, economic and technological environment. Prerequisite: MGMT 3010.

MGMT 4500: Business Strategy and Policy (3). A course which integrates the student's knowledge of business functional area disciplines into analysis and solution of managerial and business problems. Corporate strategies, objectives, policies, ethical dilemmas, business problems, functional areas and managerial decision making are examined utilizing case studies. Particular emphasis is placed on operating in a global business environment. Prerequisites: Satisfactorily completed all other core business courses.

MGMT 4550: Strategic HR Management Capstone Course (3).(Formally MGMT 4090). This course is the capstone for the HR program. This course explores the relationship between HR and organizational strategy, globalization, outsourcing and internal consulting. Specific topics covered are managing organizational culture, change management, vender management, team building and leadership. Prerequisites: MGMT 4110or MGMT 4070.

MGMT 4600: Supply Chain Strategy (3).Planning and design of systems for goods and service flows in supply chain. Integrated supply chain strategies synthesizing supply management, production, logistics, and enterprise resource planning (ERP) systems. Use of ebusiness in the integration, control, and execution of business processes in the supply chain. Prerequisites: MKTG 4400 and MKTG 4300.

MGMT 4800 and 4810: Internship (3, 3). College of Business Internships are designed to provide students supervised practical learning experiences in government, business or industry. Formal proposals, project objectives, and learning plans must be reviewed and approved by the Department Chair. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty member. Each course is three credit hours. Prerequisites: Students must be approved by the Department Chair to enroll in each course and must have full admission to the upper division in the College of Business. Specific course requirements are available from the College's Office of the Associate Dean.

MGMT 4990: Independent Study in Business (1-3).A course which allows outstanding students to investigate, in depth, approved business topics of the students' choice. Studies will be coordinated by a senior member of the departmental faculty. Prerequisite: Approval by Department Chair before registering.

## Marketing (MKTG)

MKTG 2900: Current Topics in Marketing (3).Explores selected areas of marketing, including global issues. Pre-requisite: MGMT 1010 (or equivalent) or approval of the instructor.

MKTG 3010: Basic Marketing (3).A comprehensive overview of the process employed by profit and nonprofit organizations of marketing goods, services, and ideas. The modern marketing objective is customer satisfaction at a profit (or other measure of success) through product, distribution, promotion, and price. This study of basic marketing concepts and terminology is set in the real-world context of the organization, competition, the economy, regulation, culture/society, and technology. Prerequisites: Junior standing and ECON 2020, or consent of the Department Chair.
MKTG 3200: Sales Management (3). The course covers the nature of the basic selling function as well as salesperson selection, training, compensation, supervision, motivation. In addition, this course touches on how to determine sales budgets, quotas, territory designs, and sales analysis. Prerequisite: MKTG 3010.

MKTG 3300: Applied Marketing Research (3). This course examines the role of information in decision making with special emphasis on the applied techniques and methods used to identify marketing opportunities or solve marketing problems. The completion of an actual research project is generally required. Prerequisite: MKTG 3010.

MKTG 3400: Business Ethics (3). Consideration of ethical, legal, and human relations dimensions in the business and nonprofit environments. Cross-listed with MGMT 3400. Prerequisite: MKTG 3010.

MKTG 3500: E-Business Models (3). A survey of the dynamic business issues surrounding the development and emergent patterns of the electronic commercialization in the global marketplace. Included is an overview of internet development and security. Leveraging new technologies to enhance business processes, unique characteristics of e-marketing, and the legal, ethical, and regulatory issues in conducting e-business. Prerequisite: MKTG 3010. Cross-listed with MGMT 3500.

MKTG 4020: Quality Management (3). An integrated study of quality issues in the entire supply chain. The course will emphasize the continuous improvement of business processes, as well as the design, establishment, evaluation, and improvement of quality systems in the supply chain. Issues on Quality System Certification to meet industry and international standards shall also be addressed. Cross-listed with MGMT 4020. Prerequisite: MGMT 3010.
MKTG 4050: Consumer Behavior (3).An examination of the social, psychological, and decisional aspects of the buying process of individuals and households. Application of this knowledge is made via the selling organization's service of consumers by better satisfying
their needs. Prerequisite: MKTG 3010.
MKTG 4060: Contemporary Topics in Marketing (3). Research into selected areas of marketing. Pre-requisite: MKTG 3010 (or equivalent) and approval of instructor.

MKTG 4100: Organizational Marketing Management (3).Roles, relationships and structures of organizational buying and selling with particular emphasis on the economic and social influences. Managing the marketing and channel structures is a major theme. Prerequisite: MKTG 3010.

MKTG 4150: Integrated Marketing Communications (3). This course provides various strategies and tactics used to utilize the promotional variable of the marketing mix. An integrated marketing communications plan contains elements of the coordination of advertising campaigns, public relations, publicity, sales promotional activities, and personal selling decisions. Details of the inception,
execution, evaluation and control of a promotional campaign that include media and creative decisions will be presented. Prerequisite: MKTG 3010 or instructor's consent.

MKTG 4200: Marketing Channels (3).Channels of distribution for goods and services in business settings. Considers methods of optimizing the number, quality of institutions and activities employed in dealing with exchange, and space and time aspects of channel management. Relates management of marketing channels to selecting marketing mix and achieving organizational objectives. Prerequisite: MKTG 3010 or instructor's consent.

MKTG 4250: Retailing Management (3). This important industry employs one out of eight people in the U.S. workforce. Exciting and challenging career opportunities are available to business graduates, plus the study of retailing creates better informed and wiser consumers. Since the retail store is a complete business, every aspect of business is brought to bear plus those unique to the field. Prerequisite: MKTG 3010.
MKTG 4300: Procurement (3). All organizations purchase for use and some (middlemen) purchase for both use and resale. A multitude of buying principles has developed separately for each of these purposes but will be studied together in this unique course. Buying in both instances is designed to satisfy the needs of other than the one(s) doing the buying. Organizational and customer need satisfaction act as the motivations for buyers who must serve well in order to succeed. Prerequisite: MKTG 3010.

MKTG 4350: International Marketing (3). Global trade and consumption patterns; alternative methods for international exchange; managerial and marketing issues raised by the inclusion of multiple social, cultural, and political structures in the marketing environment. Prerequisite: MKTG 3010.
MKTG 4400: Logistics (3). Analysis of logistic and transport services. Contemporary issues in: customer service; distribution operations; purchasing; warehousing location, design and operation; carrier selection; transportation costing and negotiation. Prerequisites: MKTG 3010 or MGMT 3020.

MKTG 4500: Non-profit Marketing (3). This course undertakes the dual task of examining the service sector, which comprises an everincreasing proportion of GNP, as well as the diverse set of organizations which operate under special governmental dispensation for the purpose of serving society with objectives other than achieving profit. While the basic marketing principles apply in both cases, special emphasis will be given to operational differences between these two important categories of marketers and their goods/profitoriented counterparts. Prerequisite: MKTG 3010.
MKTG 4550: Marketing Strategy (3). This is a capstone course in Marketing (to be taken near graduation). It focuses on strategic planning and operations, which integrates various topics such as the marketing concept, market segmentation, brand building, consumer attitudes, marketing research, and integrated marketing communication. A computer-based marketing simulation as well as business plan is required. Prerequisites: MKTG 4050, and MKTG 3300.

MKTG 4900: Independent Study in Marketing (1-3). A course which allows outstanding students to investigate in depth, approved marketing topics. Studies will be coordinated by a member of the departmental faculty. Prerequisite: Approval of Department Chair.

## The College of Education

Kimberly King-Jupiter, Ph. D., Dean

Office: 118 Clay Education Building
(615) 963-5451

## General Statement

The College of Education is located primarily in the Clay Education Building. In 1968 this building was dedicated to Robert E. Clay, a prominent community activist and pioneer in education. Emblazoned upon the front of the building are three principles which guide the vision and mission of the college:
(1) enlightenment and understanding (2) service to humanity, and (3) instruction and discipline.

## Vision Statement

The College of Education aspires to be a place where students at both initial and advanced levels explore current research as they prepare to become competent and caring professionals who are able to work effectively with diverse populations.

Further, the College of Education seeks to provide students with global education opportunities, to inspire them toward a demonstrated commitment to service for others, and to provide them with the knowledge, skills, and dispositions necessary to excel in their chosen professions.

## Mission Statement

The mission of the College of Education is to prepare teachers, counselors, psychologists, and administrators to work effectively with schools and communities.
Additionally, the College of Education provides all students with the technological skills, knowledge and commitment to diversity necessary for the provision of global and community service, and demonstration of professional excellence.

## Goals

1. To prepare elementary, secondary, and special education teachers; counselors; supervisors; administrators; school psychologists; counseling psychologists, sport administrators and exercise science specialists.
2. To provide opportunities for students to pursue research and its uses in solving the problems of education.
3. To assist graduates in finding teaching and other positions after they have had experience in their profession.
4. To provide students with opportunities for knowledge and understanding of the diverse society in which they live and their relation to and responsibility in such a society.
Specific goals related to diversity are:
5. Involve learners in experiences that will allow them to examine their own cultures.
6. Expose learners to diversity through experiences, literature, and discussion.
7. Encourage the development of positive and supportive attitudes about diversity.
8. Involve learners in situations that will provide opportunities for direct contact with individuals who differ from them.
9. Provide instruction in the design, implementation, and evaluation of educational materials that are appropriate for diverse settings.
10. Guide learners in the development of teaching strategies that consider diverse perspectives.
11. Maintain a diverse faculty and student body.

## Accreditation and Memberships

Teacher preparation for undergraduate and graduate programs for the preparation of teachers and related professionals are accredited by the National Council for Accreditation of Teacher Education.

The College of Education also holds membership in the American Association of Colleges for Teacher Education, the Council of Academic Deans from Research Education Institutions, Teacher Education Council of State Colleges and Universities, the Tennessee Association of Colleges for Teacher Education, the National Association of Multicultural Education, the American Psychological Association, and the University Council for Educational Administration.

## Offices in the College of Education

## Curriculum Laboratory

The Curriculum Laboratory is a center for instructional materials and other resources in teacher education. It is designed for students and teachers in the professional core courses in education, the specialized professional courses, and student teaching.
The laboratory is a hands-on facility where students and alumni come to create and carry out research. The laboratory serves as a depository for the state of Tennessee textbook collection (grades $\mathrm{K}-12$ ). The laboratory director offers workshop experiences for our undergraduate students in materials and manipulatives. The laboratory is located in the Clay Hall Education Building.

## Office of Teacher Education and Student Services

This office is administered by the Associate Dean for Teacher Education and Student Services. The College of Education provides pre-service field and clinical experiences in order to afford opportunities for teacher candidates to link theoretical information with real life situations through observations, one-to-one interaction, small group participation, and, Clinical Practice (student teaching/clinical residency). The Office of Teacher Education and Student Services coordinates all placements for school-based activities. The Office processes applications and makes recommendations to the State Department of Education for licensure as teachers, principals, school counselors, and school psychologists.
The Office of Teacher Education and Student Services screens all applicants to the Teacher Education Program. The Office maintains records verifying that candidates (a) met standards for admission to Teacher Education, (b) successfully completed student reaching, (c) received recommendation for licensure, (d) passed Praxis Exams, (e) received criminal background clearance, and (f) met performance expectations. Program coordinators in academic licensure areas review candidates' programs and monitor their retention status; the Assistant Dean for Teacher Education is informed of candidates' progress.
Candidates who do not meet the retention standards are subject to dismissal from the Teacher Education Program. Students who desire to obtain teacher licensure must check with the Office of Teacher Education and Student Services and content advisors for current programs of study as Teacher Education transitions to the "Ready2Teach" full-year residency program.

NOTE: Candidates admitted to Teacher Education will adhere to Ready2Teach requirements. Ready2Teach is designed to prepare new teachers to be ready to teach from the first day in the classroom. Candidates in Ready2Teach are engaged in co-teaching with a mentor teacher for two semesters. Ready2Teach requires residency in K-12 schools during the senior or final year (Fall/Spring) of undergraduate teacher licensure programs. The residency year includes Residency 1 during the Fall Semester and Residency 2 during the Spring Semester. Residency 1 will include methods courses and 100+ hours field study in K-12 schools. Residency 2 requires a full semester ( 16 weeks) of student teaching. Residency 1 will only be offered in the Fall, while Residency 2 will only occur in the Spring. This initiative applies to all undergraduate
teacher education candidates pursuing teacher licensure. Students are required to seek advisement regarding their licensure programs as early as possible during their academic career at Tennessee State University to ensure that all prerequisite courses and Praxis exams are complete in preparation for Residency.

## Professional Education Council

The Professional Education Council is the coordinating body for the Teacher Education Program. Its principal objectives are:

1. To help provide and perpetuate an instructional climate favorable to the healthy growth of Teacher Education Program.
2. To develop and administer policies which will ensure that competent candidates with professional promise are prepared and recommended for entry into the teaching profession. The Council develops policies relating to admission, retention, counseling, records, curricula and standards for completion of a program in Teacher Education, Professional School Counseling, School Psychology, and School Leadership.
3. To review and recommend to the Teacher Education Unit Department Chair (College of Education Dean) proposals for revision/approval of courses and programs leading to teacher licensure.

The Professional Education component provided by the College of Education is designed to develop the competencies necessary for beginning teachers, based on the knowledge, skills, and dispositions (KSD's) in seven Key Areas of Performance.

1. KS1. Plan: Design and implement instructional plans that reflect sound content knowledge and include meaningful learning for all, utilizing appropriate technology and accommodating diverse needs. D1. Plan: Value learners' experiences and strengths as a basis for growth and their errors as learning opportunities.
2. KS2. Maximize Learning: Encourage critical thinking, problem solving, active inquiry, and cultural pluralism; and differentiate learning opportunities for diverse needs, using human, literary, and technology resources effectively. D2. Maximize Learning: Provide quality education to all learners, encourage critical thinking and self efficacy, and believe in and help all to succeed.
3. KS3. Evaluate: Systematically assess and evaluate learners' diverse abilities; and in teaching and learning, reflect, adjust for diverse needs, and repeat the process. D3. Evaluate: Facilitate ongoing learning through reflection and assessment.
4. KS4. Manage: Competently apply theory to create a caring, positive and productive learning environment, facilitated by technology and with sensitivity to diversity. D4. Manage: Maintain a positive and
productive learning environment that also both encourages and protects learners.
5. KS5. Model Professionalism. Demonstrate professional ethics, standards, and responsibilities, including respect for diversity; pursue service and professional growth opportunities, and use technology effectively. D5. Model Professionalism: Consistently demonstrate caring, fairness, responsibility, professional dress and behaviors, appropriate interactions, professional standards and ethics, commitment to service, and respect for all learners and constituents.
6. KS6. Communicate: Demonstrate effective oral, written, and interpersonal communication abilities in interactions with students, families, and the professional community, while respecting cultural and familial diversity. D6. Communicate: Habitually communicate effectively in all teaching and learning interactions, cooperate with all constituents, and value the communication of others.
7. KS7. Specialize: Demonstrate and apply thorough content knowledge and effective principles and practices specific to the area(s) of specialization. D7. Specialize: Demonstrate dispositions consistent with specialty area(s) standards in order to facilitate the success of all.

## Teacher Education Admission and Retention Requirements

## Admission to the Teacher Education Program

1. Students who desire to be a candidate for admission to the Teacher Education Program will apply to the Office of Teacher Education and Student Services, typically in the second semester of the sophomore year.
2. Each student will submit documentation that s/he has:
a. Completed at least 31 semester hours of course work, including: ENGL 1010, 1020, PSYC 2420, EDCI 2010, and an appropriate sequence of freshman mathematics and freshman science;
b. Earned a grade of C or better in each of the following courses: ENGL 1010, 1020, PSYC 2420, EDCI 2010;
c. Maintained a C or better average in all General Education mathematics and sciences courses;
d. Earned a 2.75 GPA or better on a 4-point scale in all previous college work;
e. Passed a criminal background investigation. (see Criminal Background Check)
3. Each student will provide official records that indicate he/or she has:
a. Earned acceptable scores on the Core Academic Skills for Educators (Praxis I)

| Assessment |  |
| :--- | :---: |
| Skills Test | Core (Praxis I) |
| Mathematics | 150 |
| Reading | 156 |
| Writing | 162 |

Candidates who fail to pass any required subtest(s) of the Praxis I may retake such subtests as often as such tests are administered. Candidates retaking any of the subtests must attain cut off scores in effect at the retesting time.

Students who score 22 or greater on the ACT or a combined score of 1,020 on the verbal and mathematics portions of the SAT are exempted from having to take the Core ( Praxis I);

Persons who fail the Core Skills tests after having taken them twice may qualify to appeal if additional criteria are met (see Teacher Education Handbook).
b. Two positive recommendations on the Behavioral Disposition Rating Scale: one from his/her content area advisor, and another from a professional education professor or another non-relative education professional.

Students who have not been admitted to the Teacher Education Program will not be permitted to enroll in the following courses: EDCI 3870, EDCI 3110, EDRD 4910, EDRD 4240, EDSE 3330, PSYC 3120, and all methods courses.

## Retention

To remain in good standing in the Teacher Education Program, the candidate must:

1. Maintain a cumulative GPA of 2.75 or above;
2. Continue to exhibit professional growth characteristics essential to becoming an effective educator;
3. Maintain a clear criminal background;
4. Meet all criteria for admission to clinical practice at the appropriate time.

## Admission to Residency 2 (Student Teaching)

To be admitted into Residency 2 / Student Teaching, the candidate must have been admitted into the Teacher Education Program, be in good standing, and comply with the following:

1. Meet all Professional Education requirements to date;
2. Document passing scores on all of the required Praxis II examinations in the semester prior to Residency 2;
3. Apply for Residency 2 through the Office of Teacher Education; submit the completed application, typically during the first semester of the senior year; complete a structured interview that includes evidence of adequate technology skills;
4. Maintain a cumulative GPA of 2.75 or better;
5. Complete the prescribed prerequisite professional education courses and all courses in one's major area of specialization with a grade of $C$ or better;
6. Exhibit professional growth characteristics essential to becoming an effective educator;
7. Provide physician certification that the candidate is free from any communicable diseases (Tuberculosis);
8. Supply documentation of professional liability insurance; and
9. Receive a positive recommendation for admission to Residency 2 from the interview team.

## NOTE:

1. During the Clinical Semester, candidates are limited to a maximum of twelve (12) semester hours, consisting of nine (9) hours in student teaching and three (3) hours in clinical seminar. Dual placement will be a part of the fifteen-week Clinical Experience. Students who receive a grade of $C$ or $D$ in student teaching may graduate from the University but will not be recommended for licensure.
2. Candidate must complete a minimum of six (6) approved semester hours at Tennessee State University prior to student teaching regardless of previous studies (effective fall 2004). The Associate Dean for Teacher Education and Student Services must approve the courses affected by this policy.

## Certification Recommendation Requirements

In order to be recommended for certification, the candidate must:

1. Meet all teacher education requirements to date;
2. Complete all graduation requirements;
3. Earn a grade of $B$ or better in Residency 2;
4. Maintain a cumulative GPA of 2.75 or above;
5. Present acceptable score(s) on each test required in Tennessee, currently the Praxis II Examinations: Principles of Learning and Teaching (PLT) and appropriate Specialty Area test(s), and complete the application form.
6. Attain a positive exit interview;
7. Successfully complete edTPA Assessment.
8. Meet all requirements for Tennessee Apprentice Licensure.

## NOTE:

A student who already holds a bachelor's degree (Post-Baccalaureate) and is seeking an institutional recommendation for certification in Tennessee must meet all
institutional requirements for certification (see the Office of Teacher Education and Student Services for Post-Baccalaureate requirements). Any student teaching/ internship/practicum experience that is required for a TSU institutional recommendation for certification/licensure by the Tennessee State Department of Education must be completed at Tennessee State University regardless of one's previous studies.

## Criminal Background Check

Many of the professional education courses require a field experience component, where TSU students observe, assist, and work directly with children in the schools and educational partners. Current College of Educational Policy in accordance with Tennessee Education Code requires that: All TSU students who are sent off-site as part of their College of Education academic/course requirements must have obtained a cleared Tennessee Bureau of Investigation (TBI) criminal background check, and that background check be on file with the Office of Teacher Education and Student Services regardless of their status of admission or non-admission to a Teacher Education Program. (No other entity ID badges or background clearance will be accepted).

The State of Tennessee has identified Identogo Systems as the provider of this service. The cost of fingerprinting is \$48 and may be paid by credit card online or by telephone at the time registration is completed. A Tennessee Criminal
Background Check Form instruction sheet is available in the Teacher Education and Student Services Office located in Clay Hall room 112.
Registration for fingerprinting and the background check can be completed online at: http://www.identogo.com.
Registration may also be completed by calling 1(877) 4297746. Each person registering will be required to provide his or her social security number along with the following information:

## Online Background Registration Instructions

[^0]Click GO
> Select Child - Related Worker (Private) - Click GO
> Enter ORI\# TNCC19138 - Click GO
> TSU TESS ---- Select - YES
> Enter Zip Code
> Select site/date/time
> Complete Applicant Information - Follow prompts
Prior registration is required for fingerprinting in the State of Tennessee, regardless of the Tennessee location where the fingerprinting is done. Persons who have not registered will not be fingerprinted.

## Approved Undergraduate Teacher Education Program Certification Areas

Please Contact the Content Area Advisor or the Office of Teacher Education and Student Services to insure the accuracy of the certification area's program of study.
Agriculture/Agriscience 7-12 (add-on only)
Art K-12
Biology 7-12
Care Guidance of Children 9-12 (FCS add-on only)
Chemistry 7-12
Early Childhood Education PreK-3
Elementary Education K-6
English 7-12
ESL Pre K-12 (Post-Baccalaureate only)
Family and Consumer Sciences 5-12
Food Management and Production 9-12 (FCS add-on)
French 7-12
Geography 7-12
Government 7-12
Health \& Wellness K-12
History 7-12
Mathematics 7-12
Middle Grades Education 4-8 (Post-Baccalaureate only)
Music (Instrumental) K-12
Music (Vocal/General) K-12
Physical Education, K-12
Spanish 7-12
Special Education: Modified K-12 (Post-Baccalaureate only)
Visual Arts K-12

# Center for Career and Technical Education 

Chip Harris, Ed.D., Director<br>Avon Williams Campus A-402<br>(615) 963-7344

## General Statement

The Center for Career and Technical Education is a collaborative effort between the College of Education at Tennessee State University, the Tennessee Department of Education, and the local education agencies offering Career and Technical Education programs in Tennessee. The Center, serving as a state-wide clearinghouse, offers services to new instructors in Career and Technical Education (CTE), to the Tennessee Department of Education as well as to the local system administrators. The Center offers advisement and advancement coursework to new teachers at the K-12 level on the Occupational License (Trade and Industry, Health Science), and on the Transitional License (Agriculture, Business, Family and Consumer Science, Marketing and Technology Education ). In addition, the Center serves new teachers of adult students in the Tennessee Technology Centers.

The Center objectives are:

1. To provide support to new CTE teachers in meeting the requirements for advancement from the Apprentice Occupational License to the Professional Occupational License through advisement and required coursework.
2. To provide CTE instructors with opportunities for knowledge and understanding of the multicultural society in which they live and their relation to and responsibility in such a society.
3. To assist new CTE instructors with their required education coursework by developing an individualized program of study; tracking their progress and reporting completion of the program.
4. To provide in service opportunities to new CTE instructors through new teacher workshops offered twice times annually.
5. To prepare new CTE instructors to advise their curricular based student-professional organization by offering training workshops for the teachers.
6. To assist experienced CTE teachers through advisement and coursework in meeting recertification requirements.
7. To represent Tennessee State University and teacher education on Tennessee Department of Education CTE teacher licensure committees.
8. To provide a sound program of guidance and to work cooperatively with other departments, offices and colleges of the university and system in implementing the program.

## Center for Career and Technical Education Programs Occupational Licensure Program:

New CTE teachers on Occupational Licenses complete an 18credit hour program of study as a part of their requirements to advance to the professional license. The teachers are admitted to Tennessee State University to complete their coursework and receive advisement on the advancement process. The coursework is offered online. The Occupational Licensure program at Tennessee State University is based upon admission to the University and application for the Apprentice Occupational License. Teachers have three years to complete the program and advance their licenses.

## Transitional License Program for CTE Teachers:

CTE teachers can earn a full teaching license through the Transitional License offered by the TN Department of Education. The Center offers advisement and the classes needed to earn a full professional license in the areas of Agriculture Education, Business Technology Education, Family and Consumer Science Education, Marketing Education and Technology Engineering Education. The Transitional Licensure program at Tennessee State University is based upon the candidate holding a Bachelor's degree in the field (or related) he/she will teach and a position in a Local Education Agency. The teachers are admitted to Tennessee State University to complete their coursework and receive advisement on the advancement process. The coursework is offered online. Teachers have three years to complete the program and advance their licenses.

## Tennessee Technology Center Program:

New instructors in the Tennessee Technology Centers (TTC) are required to take a series of six courses to qualify for tenure in the TTCs. The Center for Career and Technical Education provides advisement and coursework for the instructors as they work toward tenure. The Tennessee Technology Center program at Tennessee State University is based upon the candidate securing a position teaching at a TTC. The instructors are admitted to Tennessee State University to complete their coursework and receive advisement on the advancement process. The courses are offered online.

## Department of Psychology

Kiesa Kelly, Ph.D., Department Chair<br>303 Clay Hall<br>(615) 963-5451

Faculty: C. Blazina, J. Campbell, J. Chatman, L. de la Mothe, J. Dossett, L.Guthrie, M. Hammond, R. Jeffries, K. Kelly, J. Lee, M. Lee, D. Miller, R.Oatis-Ballew, J. Popkin, M. Shelton, A. Sibulkin, J. Shive, S. Trotter and T. Webb

## General Statement

The philosophy of the Department of Psychology is embodied in the concept that psychology is a discipline that contributes to the understanding of human behavior and experience. The emphasis of the program is on the scientific study of behavior and practical applications of this knowledge.
The objectives are to provide undergraduate majors and minors with courses of study and related experiences that provide 1) A general avenue for increased understanding of human behavior, 2) A solid foundation for advanced study leading to careers in the fields of psychology, counseling and guidance, or to study in the health professions, social work, and pupil personnel services 3) Training for bachelor's level entry into careers in mental health services, industry and human services, and 4) the ability to enhance the quality of one's life and to relate more effectively with others.

The Psychology major, as a participating WRITE Program, is committed to providing students with the opportunity to develop the written communication skills necessary to succeed in their discipline and vocation. Working in partnership with the WRITE Program, the Psychology Major builds on and promotes the transference of writing skills from the general education curriculum through specifically sequenced core courses.

## Admission, Retention, Graduation

The undergraduate curriculum in psychology terminates in a Bachelor of Science Degree. All majors are required to take a total of 34 hours of psychology courses. Of this number, there are 16 hours of required psychology courses and 18 hours of elective psychology courses.

The required courses include: PSYC 2010 (General Psychology), PSYC 2180 (Elementary Statistics) and 10 additional hours in psychology at the 3000/4000 level. The 10 hours of additional required coursework includes: PSYC $3180,4110,4115$ or 4116,4500 or 4820 . A total of 18 hours of psychology electives are required.
Majors must earn a grade of $C$ or better in all psychology courses counted towards the major. Majors who receive a grade of $D$ or $F$ in a required psychology course must repeat and pass the course with a grade of C or better. When a course is a prerequisite for another psychology course, a grade of C must be earned in the course before taking the psychology course for which it is a prerequisite.

Majors are required to participate in performance evaluation measures (taking various tests, responding to inquiries) designated by the Department, College or University.

## Bachelor's Level Employment

Students who plan to seek employment in the Mental Health field with the Bachelor's Degree in Psychology should enroll in Field Placement, PSYC 4360, after completing prerequisites.

## Social Science Concentration

A student may elect to pursue a social science major with a concentration in psychology (see Arts and Science Interdisciplinary Degree Program in this catalog for a detailed description). Students in this program may design a course of study comparable to the educational background provided through the psychology major while at the same time tailoring it to their specific goals and interests.

## Departmental Requirements for Bachelor of Science in Psychology - Total 120 Semester Hours

All majors in Psychology must take the following courses:
General Education Core (41 hours): The General Education Requirements for the Bachelor of Science degree in Psychology are the same as the University Requirements. The following courses and hours are required: Communication (9), Humanities (9), Natural Sciences (8), Math (3), American History (6), Social Science (6).
Major Required Core (16 hours): PSYC 2010, 2180, 3180, 4110,4115 or 4116 , and 4500 or 4820.
Psychology Elective Blocks (18-hours):
Block 1: PSYC 3300 or PSYC 4210
Block 2: PSYC 3150 or PSYC 4130
Block 3: Choose 2 - PSYC 3210, PSYC 3410, PSYC 3510
Block 4: Choose 2 - PSYC 3230, PSYC 3310, PSYC 3530, PSYC 4240, PSYC 4360, PSYC 4370, PSYC 4400, PSYC 4515/6/7, PSYC 4605/6/7, PSYC 4620, PSYC 4810
General Electives ( 44 hours): These electives must include at least 14 hours of 3000 and 4000 level courses (which together with required Psychology courses meet the requirements of 42 upper division hours). Electives can include PSYC courses as well as courses from other departments. The advisor can recommend and will approve such electives.

## Upper Division Admission

- Upper Division Admission is granted in the semester in which the student has completed or will complete all General Education Courses and PSYC 2010, and 2180. A grade of $C$ or higher must be made in the psychology courses.
- Upper Division Admission is an official action taken by the psychology department and the student will be notified in writing that admission has been granted.

The following psychology courses require that the student has been given Upper Division Admission status before being permitted to enroll in them: PSYC 3150, 3180, 3300, 4110, 4115/4116, 4130, 4250, 4360, 4370, 4500, 4515, 4516, 4517, $4605,4606,4607,4608,4620,4810$ and 4820 . Students must also meet any University testing or other requirements necessary for upper division admission.

## Student Learning Outcomes

Students will:

1. become familiar with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. gain an understanding and ability to apply basic research methods in psychology, including research design, data analysis, and interpretation.
3. develop a respect and ability to think critically and creatively, to make skeptical inquiry, and, use the scientific approach to solve problems related to behavior and mental processes.
4. gain an understanding of and ability to apply psychological principles to personal, social, and organizational issues.
5. develop the ability to weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.
6. build competence and demonstrate the ability to use computers and other technology for many purposes.
7. develop the ability to communicate effectively in a variety of formats.
8. recognize, understand and respect the complexity of sociocultural and international diversity.
9. develop insight into their own and other's behavior and mental processes and apply effective strategies for self-management and self-improvement.
10. develop realistic ideas about how to implement their psychological knowledge, skills, and values in occupational pursuits in a variety of settings.

## Requirements to Teach Psychology in Secondary Schools

Students seeking endorsement to teach Psychology at the high school level must:

1. Be licensed in a specialty area of Social Studies (Admission to Teacher Education Program is required; see section on Teacher Education Admission and Retention in this catalog)
2. Major in History or Political Science;
3. Minor in Psychology (PSYC 2010 and 18 Upper Division Hours in PSYC);
4. Have the enhanced student teaching experience in the secondary school and middle school (Documentation of current professional liability insurance is required.)
5. Successfully pass the Praxis II Series Examinations: Principles of Learning and Teaching Test (PLT 7-12) and Specialty Area Test for Psychology.

## Minor Requirements

General Psychology 2010 plus 18 additional semester hours of 3000 and 4000 level psychology courses are required for a minor

## Bachelor of Science Degree in Psychology <br> Curriculum Guide Sheet <br> Suggested Four-Year Plan -120 hour

## FRESHMAN YEAR

FALL SEMESTER HR. SPRING SEMESTER HR.
UNIV 10001 SOC SCI* 3
PSYC $2010 \quad 3 \quad$ PSYC Electives 6
ENGL 10103 ENGL 10203
MATH* 3 Humanities* 3

* These courses must be selected from the approved courses from the category of General Education in consultation with the student's academic advisor.


## JUNIOR YEAR

FALL SEMESTER HR. SPRING SEMESTER HR.
PSYC 4110
PSYC 4115/6
PSYC 4500 or 4820
3
PSYC 4115/6 PSYC Electives 6
PSYC Electives
Electives
$\frac{5}{14}$

## SENIOR YEAR

FALL SEMESTER HR. SPRING SEMESTER HR. Electives

| 15 | Electives |
| :--- | ---: |
|  |  |
|  | 14 |

## Course Descriptions <br> Psychology (PSYC)

All 3000 and 4000 level courses have as a minimum prerequisite Psychology 2010 or the consent of the instructor.
PSYC 2010 General Psychology (3). The basic course in introductory psychology for majors and non-majors. The course introduces students to the fundamental concepts of psychological methodology, basic psychological processes, learning memory, motivation, and emotions. The course is a prerequisite for all psychology courses.

PSYC 2100 The Psychology of Adjustment (3). Study of personality development and structure, with major emphasis on personal adjustment and the functional aspects of the psychology of daily living. Topics covered include development of adjustment patterns, individual adjustment to life situations, societal definitions, treatment of the maladjusted, personal appraisal systems, and modification of behavior.

PSYC 2180 Elementary Statistics (3). An introduction to statistics for the general student, with emphasis on organizing and describing numerical data, probability, sampling distributions, correlation, regression, point estimation, testing hypotheses and distribution-free methods.

PSYC 2420 Human Growth and Learning (3). A course designed to give the student an understanding of the child as a growing organism, and how behavior is acquired; an introduction to learning theory and its classroom application; and training in the application of psychological principles to various functions of the school. Required in the professional education core. Field experience required.
PSYC 3000, 3001, 3002 Individual Projects in Psychology (1, 1, 1). Individual project under the guidance of psychology faculty. Focus of the individual project involves service learning and civic engagement. Topics will vary depending on individual student interest. Permission of the instructor is required.

PSYC 3120 Meas/Eval/Clrm in Public Schools (3). A course primarily concerned with offering training in administering, scoring, processing and using the results of standardized and teacher-made tests, and other measures of progress in schools; also training is offered in the construction of objective tests. Attention is also given to various tests as they relate to the functions, techniques, and tools of guidance and counseling. Prerequisite: Psychology 2420. Required in the professional education core. Admission to Teacher Education required for those planning to be teachers. Others enrolled with permission of the Psychology department Chair.

PSYC 3150 Principles of Learning (3). A study of classical and operant conditioning (including reinforcement, scheduling, acquisition, extinction, generalization discrimination) and topics in complex human learning (including verbal learning, memory, problem solving, information processing and concept information.) Prerequisite: Upper Division Admission.

PSYC 3180 Computer Applications and Technical Writing (3). A study of statistical and other software that is relevant to psychology; the use of the Internet in research, and aspects of technical writing in psychology including the use of APA style. Prerequisites are PSYC 2180 and Upper Division Admission.

PSYC 3210 Abnormal Psychology (3). A descriptive and theoretical survey of the major forms of psychopathology in children, adolescents and adults. The course will examine current trends and research in the field of mental health and psychopathology.
PSYC 3230 The Psychology of the Black Experience (3). The Psychology of the Black Experience deals with coping strategies of Black families (opposed to current emphasis on pathology of Black families); psychology of the Black female and Black male. Research of Black authors will be emphasized.

PSYC 3300 Physiological Psychology (3 hrs.). An introduction to the study of the relationship between bodily processes and behavior. Emphasis is placed upon the basic anatomy and psychology of sensory and motor functions, motivation, emotion, learning and behavior disorders. The laboratory focuses on individual and group experience in these areas. Prerequisite: Upper Division Admission.

PSYC 3310 Principles of Human Sexuality (3). A study of theories and current research related to psychological and physiological aspects of human sexuality, as well as the effect of sex-roles on sexual interaction.

PSYC 3410 Social Psychology (3). A study of interpersonal behavior including such topics as perceiving others, interpersonal attraction, prejudice, attitude change, social influence, aggression, altruistic behavior, group processes and the psychology of organizations.

PSYC 3510 Developmental Psychology (3). The growth and development of the human organism from a theoretical perspective: biological, cognitive, social, and emotional development.

PSYC 3530 The Psychology of Death and Dying (3). A study of such topics as the dying person, attitudes toward death, children and death, bereavement, and funeral rites. Emphasis will be placed on individual experience.

PSYC 4110 Foundations of Psychological Investigation (3). PSYC 4115 or 4116 Foundations of Psychological Investigation Lab (1) Introduction to methods of behavioral research commonly employed in psychology and education. Topics include methods of observing behavior, measurement, subject selection, design and interpretation of behavioral research, research ethics and conducting and reporting research projects in the behavioral sciences. Pre- or Co-requisite: PSYC 3180.

PSYC 4130 Human Learning and Cognitive Processes (3). This course is designed to be a survey of human cognition. Topics relating to attention, memory, language, problem solving, reasoning, decision making, concepts and categorization will be covered. A cross-cultural perspective will add to students' appreciation of the role of culture in cognition. Participation in web-based activities will further students' understanding of the role of empirical research in this area of psychology. (Note: Students who have taken either PSYC 4605, 4606, 4607, 4608): Special topics in Fall 2002 or Spring 2003- cannot get credit for this course).
PSYC 4210 Sensation and Perception (3). Survey of the study of psychological experience produced by sensory stimulation. The course will emphasize current theory and research related to vision and audition. Clinical topics related to perception, such as color blindness and synesthesia, will also be discussed. Prerequisite: PSYC2010 General Psychology or Permission of Instructor.
PSYC 4240 Behavior Modification (3). A course designed to give the student a firm background in the behavior theory for several discrete methods of behavioral management in the home, clinical settings, and the school. Ethical considerations of manipulating human behavior will be thoroughly explored. Contrast with other techniques and criticism will be documented.

PSYC 4250 Introduction to Personality Theory (3). A study and analysis of the major theoretical approaches to the personality. Prerequisite: Upper Division Admission.

PSYC 4360 Field Placement in Psychology (3). Placement experience in a mental health setting. A minimum of nine hours per week at the practicum site is required. Prerequisites: PSYC 3210, and 4370, permission of instructor and Upper Division Admission.

PSYC 4370 Fundamentals of Counseling (3). The course will emphasize understanding the helping relationship from the viewpoint of both the client and the professional. Students will be introduced to methods of interviewing, observing and gathering information. Issues, problems and values related to the counseling process will be examined. Prerequisite: Upper Division Admission.
PSYC 4400 Drugs and Behavior (3). A study of the biomedical, psycho-social and mental health aspects of drugs that affect behavior including alcohol. Substance abuse and treatment modalities will also be emphasized.

PSYC 4500 Senior Project (3). A requirement of all seniors majoring in psychology. A course in which students plan and carry out projects in the area of psychology under the supervision of a faculty person. Prerequisite: PSYC 4110 and either 4115 or 4116.
PSYC 4515, 4516, 4517 Readings and Research in Psychology (3, 3, 3). Individual study and research under faculty guidance. Prerequisite 12 hrs. of upper division psychology courses, permission of instructor and Upper Division Admission.
PSYC 4605, 4606, 4607, 4608 Special Topics in Psychology (3,3,3,3). An intensive study of some specialized area in the field of psychology. Topics will vary.
PSYC 4620 Introduction to Psychological Tests and Measurements (3). A program of study designed to give the basic principles underlying psychological measurement, training in selection and use of psychological tests, and practice in both group and individual testing. This course is an intensive study of individual differences, with emphasis on intellectual, personality, and academic achievement testing. Prerequisite: Upper Division Admission.
PSYC 4810 History and Systems of Psychology (3). A study of the historical development of psychology as a science and profession and the fundamental concepts of various schools of psychology. Prerequisite: Upper Division Admission.

PSYC4820 Senior Seminar (3). Either this course or Senior Project (PSYC4500) is required of all senior psychology majors. In this course, students will integrate theory and research from a variety of areas in psychology. The seminar will increase students' conceptual understanding of research and improve their skills in writing, public speaking, active listening, and critical thinking. Students will read extensively, complete a capstone paper and other writing assignments, give class presentations, and lead class discussions designed to critically evaluate topics in psychology. Prerequisites: PSYC4110 and either 4115 or 4116, Upper Division Admission, and at least 90 earned credit hours.

# Department of Teaching and Learning 

## John David Tiller, Ed.D., Interim Department Chair 203 Clay Hall-Education Building (615) 963-5465

Faculty: J. Asamani, S. Chakraborti-Ghosh, B. Christian, C. Dickens, B. Glimps, C. Helton, J. M. Hunter, N. Kendall, S. Lin, D. Mathis, R. McAtee, D. McCargar, M. Pangle, J. Presley, H. Richards, C. Williams.

## General Statement

The Department of Teaching and Learning is designed primarily for providing professional education for teachers.

It offers undergraduate professional courses for prospective elementary and secondary school teachers. Programs for Special Education, Reading Specialist, ESL, and Middle Grades (4-8) are offered at the post baccalaureate level (see Graduate Catalog).

The program of teacher education includes three broad areas of study: general core, academic major, and professional education. The general education courses, required of all departments offering a program leading to a teaching license, are is described in the general Academic information section of this catalog. The Professional Education core is presented below.

## Student Learning Outcomes:

Upon successful completion of courses of study, students are expected to demonstrate content mastery in the following areas:

1. Instructional Design: Design and implement instructional plans that reflect sound content knowledge and include meaningful learning for all, utilizing appropriate technology and accommodating diverse needs.
2. Critical Thinking, Problem Solving: Encourage critical thinking, problem solving, active inquiry, and cultural pluralism; and differentiate learning opportunities for diverse needs, using human, literary, and technology resources effectively.
3. Evaluation: Systematically assess and evaluate learners' diverse abilities; and in teaching and learning, reflect, adjust for diverse needs, and repeat the process.
4. Professional Ethics I Diversity: Demonstrate professional ethics, standards, and responsibilities, including respect for diversity; pursue service and professional growth opportunities, and use technology effectively.
5. Effective Communication: Demonstrate effective oral, written, and interpersonal communication abilities in interactions with students, families, and the professional community, while respecting cultural and familial diversity.
6. Content Knowledge: Demonstrate and apply thorough content knowledge and effective principles and practices specific to the area(s) of specialization.

## Career Options

The immediate career goal of those studying in the Department of Teaching and Learning is to become a K-12 school teacher. Eventually, however, many students pursue advanced degrees and become principals, counselors, supervisors, superintendents and university professors of education.

The basic pattern of professional education needed for teaching has certain common elements that apply to the challenges all teachers face irrespective of the age level of the pupils who are under their supervision. In addition, preparation for teaching on different educational levels and in various curriculum areas requires specialized training appropriate to the different areas. The basic pattern of professional education, therefore, includes (1) core professional courses required of all persons in teacher education and (2) specialized professional courses appropriate to the different areas (see major for individual licensure requirements).

## Core Professional Requirements

In planning the core professional program, attention was given to those areas of study that are considered essential to the development, understandings and competencies needed by all teachers.

## These areas include:

1. Historical, philosophical, and sociological foundations of American education.
2. Human growth and development, and the psychology of learning, including an understanding of how children grow physically, emotionally, and mentally, as well as the nurture necessary for wholesome
growth. The relationship between growth and learning and new behavior patterns is also included.
3. Understanding school organization, administration, and management, and the relationship of the school to the total community.
4. Understanding the impact of cultural, linguistic, and ability diversity on teaching and learning.
5. Techniques of measurement, evaluation, and classroom management.
6. Skill in curriculum development.
7. Additional requirements for the elementary major can be found in the Liberal Arts section of the catalog.
8. Additional requirements for the secondary education major can be found in the catalog under specific discipline areas.

## Specialized Professional Education Requirements

The specialized professional education requirements vary according to the area of licensure in which one seeks certification. All candidates for a teaching license must pass a criminal background investigation and must purchase and use electronic software to demonstrate mastery of professional standards.

The specialized requirements adapted to grades $\mathrm{K}-6$, grades $7-12$, grades K-12 include:

1. Materials and methods of teaching appropriate to the level of certification, including reading methodology.
2. Knowledge and understanding of learning and behavioral characteristics of children with disabilities.
3. Supervised student teaching appropriate to an area of endorsement.
4. Specialized requirements as outlined under the area to which they apply
5 Teacher education admission and retention requirements as specified in the introductory material included under the general heading: The College of Education.

## Admission/Retention Requirements

Teacher education admission requirements are specified in the introductory material included under the general heading: The College of Education.

## Course Descriptions

## Curriculum and Instruction (EDCI)

EDCI 2010 History and Foundation of Education (3). A course that includes a study of the historical, philosophical, and sociological foundations of the American public schools, with emphasis on the traditional function of the American public school as a local community institution. Field experience required.

EDCI 2100 Field Study in Education (2). A course that presents problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships and school organization. Co-requisite: EDC 3110.

EDCI 2200 Field Study in Education (2). A course that presents problems of teachers in active service in the fields of methods of teaching, curriculum materials, school-community relationships and school organization. Co-requisites: EDCI 3500 and EDRD 3500.

EDCI 3110 Classroom Behavior Management (3). A course that addresses strategies in the area of classroom management. Skills and dispositions are emphasized in special methods associated with creating a learning environment that encourages positive social interaction, active engagement in learning and self-motivation.

EDCI 3500 Instructional Strategies for the Elementary Classroom (3). "wo questions that must be answered by a teacher each day are: "What will I teach?" and "How will I teach it?" This course is designed to introduce the art and science of elementary school curriculum design through theory, research, practice, personal experience, and the advice of experienced teachers. This course addresses the developmental needs of students in the elementary school curriculum. It includes discussion and reflection on current research and practice
relative to teaching/learning objectives, planning, principles of instruction, interdisciplinary teaching, controversial issues, and models for teaching academic disciplines. This course is designed to be taken in the second semester of the junior year as partial preparation for thoughtfully and effectively teaching students in K-6 classrooms. It includes a focus on both content and on teaching methods and structures uniquely suited to the social studies. Co-requisites: EDRD 3500 and EDCI 2200.

EDCI 3870 Curriculum Development (3). A course that present a critical study of the reorganization, construction, and administration of the school curriculum in light of modern educational principles and objectives. Prerequisite: Admission to Teacher Education. Field experience required. Documentation of current professional liability insurance is required.

EDCI 4190 Technology in the School (2). A course designed to examine and reflect on the pedagogical usefulness of technology integration for teaching and learning.

EDCI 4550 Methods in Teaching Elementary Mathematics (3). A course designed to explore concepts, strategies, and methods including the use of technology used in teaching mathematics to elementary students. Emphasis is given to instructional and assessment methods that enable teachers to work with students' abilities in order to build a foundation for increasing their understanding of mathematics for future academic success and college and career readiness. The course content is aligned with recommendations by the National Council for Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics and the Common Core State Standards (CCSS) for Math.

EDCI 4600 Methods in Teaching Elementary Science (3). This course focuses on methods and materials for teaching elementary school mathematics and science. This course is designed to exemplify constructivist teaching practices as recommended by the National Council for Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics and the National Science Education Standards (NSES). Emphasis in the course is placed on the content of elementary math and science, as well as strategies used to teach these subject domains in the elementary classroom.
EDCI 4620 Field Study in Education (3). A course that presents problems of teachers in active service in the fields of methods of teaching, curriculum materials, school community relationships, and school organization. Co-requisites: EDCI 4500 and EDRD 4500.

EDCI 4705 Educational Seminar (3). A course that presents a study of current issues and research in education. Emphasis is placed upon the student's developing a coherent approach to educational theory and practice. Taken concurrently with EDCI 4721, Student Teaching in the Secondary School. Prerequisite: Admission to Teacher Education.

EDCI 4706 Educational Seminar (3). A course that presents a study and analysis of the basic course content of courses taught in the elementary schools. Taken concurrently with EDCI 4720 Student Teaching in the Elementary School. Prerequisite: Admission to Teacher Education.

EDCI 4720 Enhanced Student Teaching in the Elementary School (12). A course that consists of directed observations, participation, and teaching in the elementary grades. It provides opportunities for students to work in typical school situations under the guidance of experienced teachers. Parallel readings and conferences for further interpreting and enriching these experiences are held regularly. This course is open only to seniors and teachers with some experiences. Prerequisite: Completion of professional education requirements and Admission to Teacher Education. Documentation of current professional liability insurance is required. Passing scores on Praxis II examinations.

EDCI 4721 Enhanced Student Teaching in the Secondary Schools, Grades 7 through 12 (12). Actual classroom experience in secondary schools under the charge of expert teachers in cooperating schools. Student teacher schedules should be arranged well in advance of the senior year and planned so as to enable the student to devote full time to student teaching during the semester in which the course is to be completed. Required for all students who are following the professional education core that leads to teaching as a career. Prerequisite: Completion of professional education requirements and Admission to Teacher Education. Documentation of current professional liability insurance is required. Passing scores on Praxis II examinations.

EDCI 4900 Multicultural Education (3). A course designed to develop awareness, understanding, and sensitivity to the needs and interests of ethnic and cultural groups. The differences and similarities that characterize individuals and groups should be cherished for their worth and cultivated for the benefits they bring all people.

## Special Education (EDSE)

EDSE 3330 Education of Exceptional Children (3). A course that explores principles, characteristics, and special needs; local and state programs for diagnosis and care; educational provisions in regular or special classes, home teaching, social and vocational guidance. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

## Reading Education (EDRD)

EDRD 2010 Reading in the Content Area (3). A course designed as an experience in reception and processing of ideas in the evaluation, application, and retention of textual materials and designed to provide strategies, applying high-level reasoning skills to identify, formulate, and solve problems. Emphasis will be placed upon methods and procedures for use with inter-disciplinary textbooks designed to provide a link across the discipline for directive work in all fields of college study.

EDRD 3100 Strategies for Successful Test-taking (1). A course designed for selected students. The major purpose of the course is to provide instruction that will facilitate the development of skills and techniques related to extending competencies in test-taking. Students must complete prescribed laboratory activities.

EDRD 3500 Literacy Methods I (3). This course, designed to be taking in the second semester of the junior year, includes examining the reading process, understanding how children learn to read and write, exploring the stages of literacy development, and examining both directed and guided reading instruction as well as the role of phonics in reading and spelling. Focus is on balanced or comprehensive literacy in the early grades. This course is basic to learning how to teach reading and writing and how those change across the grades from kindergarten through middle school. Co-requisites: EDCI 3500 and EDCI 2200.

EDRD 4190 Exploring the Language Learning Process (3). A course that covers current theory concerning the nature of reading, language, and learning as well as an overview of school reading-language arts programs.

EDRD 4240 Teaching Reading in the Elementary School (3). A course that includes methods, materials and modern practices and trends in the teaching of reading at the elementary school level. Required only for students pursuing teacher certification in grades K-9 or K-12. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 4500 Literacy Methods II (3). This course, designed to be taken during the first semester of the senior year, builds on Literacy Methods I. Emphasis in this course is on assessment and interventions with struggling readers and writers. This course begins with a review of general methodology in reading and writing and moves into assessment covering Informal Reading Inventories, running record, close procedure, miscue analysis and connects findings with a variety of instructional strategies and techniques for children and adolescents who struggle with various aspects of becoming literate. Strategies and intervention techniques are tied to both assessment and state standards. EDRD 4500 is designed to integrate reading, writing, and technology with content material e.g., social studies, humanities, math, and science. Co-requisites: EDCI 4500 and EDCI 4620.

EDRD 4820 Teaching Reading Language Arts to Exceptional Learners (4). A course that covers language characteristics and the special reading-language arts needs attendant with the exceptional learner. The course is designed especially for the regular classroom teacher. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 4900 Directed Individualized Study in the Teaching of Reading (1-3). An individualized study. Consent of Instructor. Prerequisite: Admission to Teacher Education. Field Experience required. Documentation of current professional liability insurance is required.

EDRD 4910 Reading and Study in Secondary Schools (3). A course designed for all subject matter teachers. Teaching strategies, designs, and materials for teaching comprehension, advanced study skills and vocabulary; formal and informal teaching pupil abilities and interests are covered. Required only for students pursuing teaching certification 7-12. Prerequisite: Admission to Teacher Education. Field experience is required. Documentation of current professional liability insurance is required.

# College of Engineering 

S. Keith Hargrove, Ph.D., CMfgE, PE, Dean and Professor

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## General Statement

Engineering is the profession in which knowledge of mathematics and natural science is applied with judgment to develop ways to economically utilize the materials and forces of nature for the benefit of mankind.
The College of Engineering, offers Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Computer Science, Mathematical Sciences and Aeronautical and Industrial Technology. Concentrations include Computer Engineering in Electrical Engineering, Bioinformatics in Computer Science, and Aviation Management, Aviation Flight Training and Industrial Electronics Technology in Aeronautical and Industrial Technology.
The College's curricula in these programs are structured to graduate quality students capable of taking their places in the mainstream of the engineering/technology/computer science profession. Students are prepared to satisfy the manpower needs of industry and to tackle the complex technical challenges facing a technology based society.

The educational goal of the College is to prepare students to think critically, interpret knowledge, pursue lifelong learning, and function effectively and productively as members of a global society, as professionals in a technology based work force.

## Mission

Tennessee State University, established in 1890, as a landgrant institution is a major urban comprehensive university. The College of Engineering was established in 1951. Its Statement of Mission reads:

1. The College shall have an educational delivery system and research of uncompromising high quality which addresses the needs of the people and the goals of the State of Tennessee, the region and the nation in the areas of analysis, design and development of systems, system components and processes.
2. The College shall prepare students to think critical, apply knowledge, communicate effectively and function productively as members of professional teams, pursue graduate studies and engage in lifelong learning.
3. The College shall pursue basic and applied research in critical technologies including transportation and environmental engineering, design and manufacturing engineering, computer communication and networks, wireless and intelligent systems, robotics building technology, software productivity and security systems for networks manufacturing systems and individual facilities.
4. The College shall be a full partner with business, industry and related government agencies to enhance Tennessee's economy through research activities in critical technologies, continuing education and technology transfer.

In carrying out this diverse mission, the College of Engineering at Tennessee State University serves Nashville and middle Tennessee, the State of Tennessee, the Nation, and the international community with University's Motto, "Think, Work, Serve" as the basis of the College's Mission. In this regard, the College seeks to provide its students with these experiences which lead to a wholesome, well-rounded and well-balanced quality life.

The College serves a diverse population of students of all races: traditional, non-traditional, commuter, residential, undergraduates, graduates, non-degree, full-time, and parttime. In doing so, the College seeks to develop the talents of its students, including those with special academic talents as well as those who have educational, cultural, environmental, social and/or economic constraints.

## Educational Objectives

The educational objectives of the College are to prepare graduates to think critically, interpret knowledge, and pursue lifelong learning, function effectively and productively as members of a global society as professionals in a technology based work force. The graduates within a few years of graduation exhibit the following characteristic:

1. Familiarity with the systematic scientific approach to problem-solving, including the use of modern tools and current technology.
2. Development of a strong foundation in engineering / technology / computer science fundamentals.
3. Development of habits of orderliness, carefulness and objectivity.
4. Development of professional attitudes, communication skills, and professional ethics, including the understanding of the engineering / technology / computer science profession.
5. Development of an understanding and sensitivity for social, political, economic, and environmental implications of technological system in the real world.
6. Familiarity with intellectual challenges designed to arouse curiosity and a desire for lifelong learning.
7. Development of experiences that will prepare them to function effectively in multi-cultural and multi-discipline groups.

## Student Outcomes

Graduates from an engineering program in the College of Engineering, shall demonstrate the ability:

1. to apply knowledge of mathematics, science and engineering to a job assignment.
2. to design and/or conduct experiments, as well as analyze and interpret data as it relates to completing a job assignment.
3. to design a system, component, or process to meet desired needs as defined in a job assignment.
4. to function on multi-disciplinary and multi-cultural teams in the execution of a team project.
5. to identify, formulate, and solve engineering problems as it relates to a specific project assignment.
6. The understanding of professional and ethical responsibility in the work place.
7. to communicate (orally, written, graphical computer) effectively aspects of a job assignment.
8. The understanding of the impact of an engineering solution for a project in a global and/or societal context.
9. A recognition of the need for, and an ability to engage in life-long learning to keep abreast of the technological advances in present and future job assignments.
10. A knowledge of contemporary issues as it relates to the industry and products of a given company / organization.
11. The ability to use the techniques, skills, and modern engineering tools necessary for engineering practice in present and future job assignments.

## Engineering Design Experience:

A major engineering curriculum objective is to provide engineering students with the ability to systematically apply engineering fundamentals to the design of engineering components, systems and processes.

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process (often iterative). The fundamental elements of the design process are the establishment of objectives and criteria, synthesis, construction, testing and evaluation, and may include a variety of realistic constraints, such as economic and environmental factors, safety, and reliability, aesthetics, ethics and social impact. In this regard, the College has in place, a series of required courses with engineering design content, which are integrated throughout the curriculum in each engineering program.

The engineering design experience is integrated throughout the curriculum, starting with the definition of engineering and engineering design in ENGR 1020 Freshman Engineering Seminar, in the freshman year. The design experience continues in the sophomore year with ENGR 2010 Thermodynamics (or ENGR 2250 Transport Phenomena) and ENGR 2110 Statics.

Engineering design continues in the junior year with the required course ENGR 3200 Introduction to Design where upper divisions students are once again introduced to the design process in a much more rigorous and comprehensive manner, building upon concepts introduced at the freshman and sophomore levels. Specialization in each program begins in the junior year with program design courses. Program specific design courses are listed in each department curriculum. Further specialization takes place in the senior year.

Each program offers at least one course which is $100 \%$ engineering design. The engineering design sequence is completed with a two-semester capstone design course. Computer Science students are required to complete a twosemester long senior project course. An integral part of the design experience is the introduction of ethical, economical, social and safety factors required to make a design successful. These concepts are introduced during the freshman year, reinforced during the junior year and integrated into design projects in the junior level and senior level design courses. At each level, a formal written report and a formal oral presentation is required to communicate the design.

Admissions/Retention Requirements: All engineering students who plan to take upper division engineering courses, 3000 and 4000 level courses must have passed the Engineering Entrance Examination with a minimum score of $75 \%$ on each part (calculus, chemistry, and physics) of the examination.

## Engineering Entrance Examination:

The eligibility criteria for taking the Engineering Entrance Examination are:

1. Minimum grade of " $C$ " in each of the following courses: CHEM 1110, 1111; MATH 1910, 1920; PHYS 2110, 2111, 2120.
2. Minimum cumulative GPA of 2.5 and a minimum cumulative GPA of 2.5 for the group of courses listed above in Item 1 at the time of taking the Engineering Entrance Examination.
3. Completion and submission of the engineering entrance examination eligibility form to the Dean's Office at least one week prior to the examination.

The Engineering Entrance Examination is given at least five times per year. The dates for the examination may be obtained from the Dean's Office. Each student is allowed three (3) attempts to pass the engineering entrance examination.

After the second unsuccessful attempt, the student is required to repeat at least one of the following courses: CHEM 1110; MATH 1910, 1920; PHYS 2110, 2120 before the examination can be taken a third and final time.

Admission of Transfer Students: Transfer students from other institutions of higher education who plan to enter the College of Engineering must meet University admission criteria. Engineering transfer students must first take and pass the Engineering Entrance Examination before taking 3000 and 4000 level courses.

## Specific College Requirements:

1. No student will be allowed to take any departmental courses, major courses, engineering courses, mathematics, and/or science courses without having successfully completed the proper prerequisites for those courses.
2. Engineering students earning a grade of "D" or lower in a mathematics course(s), science course(s), departmental course(s), or a major course(s) must repeat that course(s) the very next time the course(s) is offered.
3. Students earning a grade of "D" or lower in a major course(s) must repeat that course(s) the very next time the course(s) is offered.
4. Each engineering student must complete a practicum prior to graduation. A practicum may include, but is not limited to, an industrial internship, co-operative education experience, research experience, assistant in an engineering or technology laboratory, and other engineering/technology practical experiences. The practicum must be approved in advance by the student's academic advisor and department chair. The practical experience must be at least eight (8) continuous weeks in length. A comprehensive report on at least one practicum is required. The report must be cosigned by a supervisor. The practicum report is to be given to the student's faculty advisor. The departmental and college offices will assist students in locating a practicum.

Engineering Programs Core Requirements: All engineering students are required to take the following engineering core courses: Mathematics (18 semester hours): MATH 1910, 1920, 2110, 3120, ENGR 3400; Science (12 semester hours): CHEM 1110, 1111; PHYS 2110, 2111, 2120, 2121; Engineering Science ( 15 semester hours): ENGR 2000, 2001, 2010*, 2110※ 2120, 3300; Design (5 semester hours): ENGR' 3200, 4500, 4510; Humanities ( 9 semester hours of which three (3) hours must be a sophomore literature course from the approved Humanities/Fine Arts list); Social Science (6 semester hours); History ( 6 semester hours): HIST 2010, 2020 or 2030, Social Science Elective** (6); Other (16 semester hours): ENGL 1010, 1020, COMM 2200; UNIV 1000, ENGR 1020, 1151, 2230, 4201, 4900 and a three credit-hour mathematics/science elective. Total Engineering Core - 90 semester hours.

## *Electrical Engineering majors will take ENGR 2250

**Humanities and Social Science electives must be chosen from an approved list with the approval of the academic advisor.

## Graduation Requirements

In addition to the University requirements for graduation, the following specific College graduation requirements must be met by students in the College:

All engineering students must repeat "D" grades earned in mathematics, science, departmental, or major courses the very next time the courses are offered until a minimum grade of "C" is earned. However, students may graduate with a maximum of two "D" grades in these courses.

All College graduating seniors must take and successfully complete all components of the ETS Exit Examination during the senior year.
Engineering students must take ENGR 4201 EIT/FE Review Laboratory and they are encouraged to take the Fundamentals of Engineering Examination ONLY with the consent of the department chair.

Accreditation: The Bachelor of Science degree programs in Architectural Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET). The Bachelor of Science degree program in Computer Science is accredited by Computing Accreditation Commission of ABET (CAC/ABET). The Bachelor of Science degree program in Aeronautical and Industrial Technology is accredited by the Association of Technology, Management and Applied Engineering.

## Course Descriptions <br> Engineering (ENGR)

UNIV 1000 Service to Leadership 1(1,0). This course is to provide all Engineering students with information about the University policies, to assist them in adjusting to the University community, and to acquaint the students with the environment as an integral part of educational development.

ENGR 1020 Freshman Engineering Seminar 1(1,0). An overview of the engineer8ing programs and profession; Engineering tools and problem solving techniques; Use of codes and standards; Engineering ethics and communication.

ENGR 1151 Computer Engineering Graphics and Analysis 1(0,3). The course is designed to develop the fundamental skills of graphics communication by manual and computer means. Sketching techniques to develop orthographic and pictorial graphics skills, standard technical drawing methods, dimensioning techniques, working drawings development skills, and lettering capability will be the fundamental focus of the course.

ENGR 2000, ENGR 2001 Circuits I and Lab 3(3,0), 1(0,3). Fundamental concepts of charge, current, voltage and power; passive and active circuit elements, phasors and impedance; mesh and nodal analysis; Thevenin's and Norton's Theorems; superposition; source transformations, natural and forced response of RL, RC, and RLC circuits average and effective values of periodic wave form; polyphase circuits. Prerequisites: ENGR 2230, MATH 2110, PHYS 2120, Co requisite MATH 3120.

ENGR 2010 Thermodynamics 3(3,0). An introduction to the nature and domains of thermodynamics; the Zeroth Law; properties and states of a pure substance; work and heat; the First Law applied to both open and closed systems; general observations and statements of the Second Law; the inequality of Clausius and entropy changes for closed and open system; ideal gases. Prerequisites: PHYS 2110.

ENGR 2110 Statics 3(3,0). Statics of particles; statics of rigid bodies in two and three dimensions; centroids and center of gravity; friction and moment of inertia. Prerequisites: PHYS 2110.

ENGR 2120 Dynamics 3(3,0). Study of the kinematics and kinetics of particles and rigid bodies; Principle of work and energy; Principle of impulse and momentum. Prerequisite: ENGR 2110.

ENGR 2230 Engineering Computer Programming 3 (2,3). An introduction to programming using the C++ language in the solution of engineering problems; Students should have basic experience using a computer but no prior programming is required. Topics include sequential, decision and repetition control statements, top-down program development and programming style, functions, basic data structures, arrays, an introduction to object technology, object-oriented programming and classes. Prerequisites: MATH 1910, ENGR 1020.

ENGR 2250 Transport Phenomena 3(3,0). Unified treatment of the principles of thermodynamics, heat transfer and fluid mechanics. Energy, analysis and the first and the second law of thermodynamics, steady state and transient heat conduction, convection and the thermal radiation process, fundamentals of fluid flow. Prerequisites: PHYS 2120.

ENGR 3100 Global Engineering Project Management 3(3,0). An overview of techniques and global sociological concepts of engineering project management. The course is intended to develop analytical skills including economic analysis, project screening and selection, organization and project structure resource managements and project control as well as global sociology theories relating to social structure, social organization, and role of the individual and social institution in the global setting. Prerequisite: Junior standing.

ENGR 3200 Introduction to Design 3(3,0). A course which considers the engineering design process as an interdisciplinary activity. Engineering Statistics, economic decision making and the design process are introduced as is oral and written technical reporting. A comprehensive design project is required as is a technical report and an oral report of the design.

ENGR 3300 Materials Science 2(2,0). An introductory course on properties and selection of materials covering atomic structure and bonding; crystal structures; crystalline and non-crystalline solids; mechanical properties of materials; polymers; phase diagrams; engineering alloys; ceramics; composite materials; and electrical, optical, and magnetic properties of materials. Prerequisites: CHEM 1110, PHYS 2120.

ENGR 3400 Numerical Analysis 3(3,0). Numerical solution of the system of linear and non-linear equations; numerical differentiation and integration; numerical solution of ordinary and partial differential equations; curve fitting; regression analysis and probability. Prerequisites: MATH 3120, ENGR 2230.

ENGR 3520 - An Introduction to Network Security.3(3,0). This course will introduce the various common security issues that are of concern in computer networks. Subjects to be covered will range from SYN floods, node authentication, address spoofing, service authentication, sniffing and routing to securing data during transmission. Software flaws will be exploited using common techniques such as buffer overruns. Intrusion detection, firewalls and securing an operating system will also be discussed. The course will also cover the issue of ethics throughout the semester. An emphasis will be placed on the applications that are currently implemented within corporations for securing their networks. There will be several required reading documents that will help the students further prepare for the class during the semester. Prerequisite: ENGR 2230

ENGR 4110-A,B,C,D,E,F,G,H Special Topics in Engineering 3(3,0). Special subject presented to cover current problems of unique advances in the leading edge of techniques. Prerequisites: Senior standing and consent of instructor.
ENGR 4201 Engineering-in-Training $0(0,5)$. A course designed to prepare students for the Fundamentals of Engineering (FE) Examination, which is a partial requirement for obtaining license as a professional engineer. Prerequisite: Senior Standing.
ENGR 4230 Legal Ethical Aspects of Engineering 3(3,0). Legal principles underlying engineering work; laws of contracts, torts, agency, real property, problems of professional registration and ethics.
ENGR 4300 Engineering Economics 3(3,0). Economic factors involved in the acquisition and retirement of capital goods in engineering practice, including interest and capitalization methods of depreciation, amortization, sinking funds, cost and rate determination.

ENGR 4400 Probability and Statistics 3(3,0). Statistics and engineering; descriptive statistics; sets and functions; proofs; permutations and combinations; discrete and continuous probability; probability distributions; Chebyshev's theorem; normał distribution; applications to operations research; treatment of data; hypothesis testing; method of least squares; regression; and application to engineering problems.

ENGR 4440 Mobile Robotics $3(3,0)$. This course provides students with hands-on experience in mobile robot design, implementation, and testing. It covers mobile robot topics such as robot hardware, robot sensing, actuation, embedded system programming, and algorithms for localization, path planning, and mapping. It briefly covers multirobot systems. Students are expected to work in laboratory in teams to build and test increasingly complex mobile robots and compete in an end-of-semester robot contest. Prerequisite: One semester of programming.

ENGR 4500 Capstone Design Project I 1(1,0). An engineering capstone design project I leading to completion of the project in ENGR 4510. A written report and an oral defense of the proposed design project are required. Prerequisites: Graduating Senior, ENGR 3200.

ENGR 4510 Capstone Design Project II 1(1,0). A continuation of capstone design project I leading to completion of the project. A written report and an oral defense of the project are required. Prerequisite: ENGR 4500.

ENGR 4900 Professional Development Seminar 1(1,0). Discussion of case studies, professionalism, professional ethics, professional development activities required in industry. Prerequisite: Graduating Senior.

## Aeronautical and Industrial Technology

William L. Anneseley, Ph.D., Department Chair<br>204 Tom Jackson Industrial Arts Building<br>(615) 963-5371

Faculty: R. Consigny and J. McBryan
General Statement: A Bachelor of Science Degree (B.S.) in Aeronautical and Industrial Technology is offered with three (3) Concentrations: Industrial Electronics Technology, Aviation Management, and Aviation Flight Training. Students may complete the first two years of study at Nashville State Community College or Columbia State Community College. Specific information can be found on the News and Interest page of the AIT website at www.tnstate.edu/ait.

The mission of the department is to provide the student with knowledge of the physical sciences, mathematics, engineering and computer science to enable them to have the capability to apply those principles within the aeronautical and industrial technology sectors.

The department programs draw upon the principles and applications of sound business management, Liberal Arts and the latest in engineering. These principles are applied in the proper utilization of products, services and the management of equipment, resources and personnel.

The Program Educational Objectives for the Aeronautical \& Industrial Technology program within a few years of graduation are as follows:

1. The ability to apply knowledge of physical sciences, mathematics and scientific approach to the engineering/technology analysis and design as productive aeronautical and industrial technicians.
2. To work effectively on multidisciplinary teams for the optimum solution of a wide range of aeronautical \& industrial technical problems in an ethical, managerial, and professional manner.
3. To continue an active program of lifelong learning and continuing education while seeking information of global and societal contemporary issues both within and outside the aeronautical/industrial professions.
4. To seek positions of greater responsibility and leadership as a practitioner and as a member of technical and professional organizations.
5. To demonstrate an ever expanding command of the most effective ways of interfacing the basic factors of production, people, machines, material information, and energy in the making or processing of a product.

The educational objectives for the Department of Aeronautical and Industrial Technology are as follows:

1. To provide the student with the knowledge of physical sciences, mathematics and engineering courses so that he/she has the capability to apply those principles within the aeronautical and industrial sector,
2. To familiarize the student with the systematic scientific approach to the identification and solution of practical problems encountered in the working environment,
3. To guide the student in determining the most effective ways for an organization to use the basic factors of production, people, machines, materials information, and energy in the making or processing a product,
4. To assist the student in developing managerial skills,
5. To develop professional attitudes, ethical character and a thorough understanding of the individual's role in society from both a national and international perspective,
6. To provide the student with intellectual challenges designed to stimulate a curiosity and desire for lifelong learning, and
7. To provide students with opportunities which will prepare them to interact effectively in multi-cultural and multi-discipline environments.

Elective Courses: In addition to the three concentrations, there are elective courses in the following areas: Aviation Management, Airport Management, Aviation Meteorology, Private, Commercial, Instrument, Multi-engine, CFI, CFII, Theory of Flight and Engines, Aviation Legislation and Aviation Safety.

The Department of Aeronautical and Industrial Technology is affiliated with the following organizations: University Aviation Association, Association of Technology, Management and Applied Engineering, Aviation Accreditation Board International, and Tennessee Aviation Association.

The Industrial Electronics Technology Concentration prepares students for positions in business and industry that require a broad technical and management background. It emphasizes the maintenance, operation and management of systems and sub-systems within the industrial and manufacturing sector.

The Bachelor of Science degree program in Aeronautical and Industrial Technology is accredited by the Association of Technology, Management and Applied Engineering.

The Aviation Science Programs are designated to provide a coordinated program combining liberal arts with concentrations in either Aviation Flight Training or Aviation Management. These concentrations lead to a Bachelor of Science Degree. Students interested in future positions in industry-related aviation, especially as either pilots or as
managers, will benefit from these concentrations. Tennessee State University is recognized by the Federal Aviation Administration as an Aviation Education Resource Center. Additionally, the University holds an FAR Part 141 Air Agency Certificate (TUOS674K) from the Federal Aviation Administration to conduct pilot ground school training.

Flight training is conducted through affiliate flight training schools located within a ten-mile radius of the main campus. Flight fees represent an additional cost to the student and are subject to market driven forces. For a list of affiliate flight schools and related costs, please contact Dr. William L. Anneseley, Department Chair.

Academic credit for pilot certificates and ratings will be in accordance with FAR Part 141 or 61 and in accordance with pertinent University policies. Incoming freshman and transfer students must make an appointment with the Department Chair in order to have their FAA Certificates properly evaluated and documented.

> Departmental Requirements for Bachelor of Science in Aeronautical
> and Industrial Technology

Industrial Electronics Technology Core: 42 Semester hours
Major Core: (industrial) A minimum of 42 semester hours including: ENGR 4500, 4510, 4900; AITT 1001, 2000, 2001, 2200, 2201, 3110, 3310, 3311, 3320, 3321, 3350, 3351, 3480, 4040, 4170, 4800.

Core Requirements reflect the standards of the Association of Technology, Management and Applied Engineering (ATMAE).

Suggested Four-Year Plan:
Bachelor of Science Degree in Aeronautical and Industrial Technology Industrial Electronics Technology - Total Hours 120

|  | FRESHMAN YEAR <br> FALL SEMESTER <br> HR. |  | SPRING SEMESTER |
| :--- | :---: | :--- | :---: |
| UNIV 1000 | 1 | MATH 1720 | HR. |
| MATH 1710 | 3 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | CHEM 1110 | 3 |
| AITT 1001 | 3 | CHEM 1111 | 3 |
| Humanities/Fine | 3 | Humanities/Fine ARTS <br> ARTS Elective | 3 |
| HPER/ROTC/BAND | 1 | elective | 3 |
|  | HPER/ROTC/BAND | 1 |  |


| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER MATH 1910 | HR. | SPRING SEMESTER | HR. |
|  | 4 | PHYS 2020 | 3 |
| PHYS 2010 | 3 | PHYS 2021 | 1 |
| PHYS 2011 | 1 | HIST 2010 | 3 |
| AITT 2000 | 3 | COMM 2200 | 3 |
| AITT 2001 | 1 | PSYC 2010 | 3 |
| ENGL 2110 | 3 | AITT 2200 | 3 |
|  |  | AITT 2201 | 1 |
|  | 15 |  | 17 |
| FALL SEMESTER | JUNIOR YEAR |  |  |
|  | HR. | SPRING SEMESTER | HR. |
| HIST 2020 | 3 | AITT 3320 | 3 |
| AITT 3310 | 3 | AITT 3321 | 1 |
| AITT 3311 | 1 | AITT 3480 | 3 |
| AITT 3350 | 3 | MGMT 3010 | 3 |
| AITT 3351 | 1 | Social/Behavioral Science Elective | 3 |
| AITT 3200 | 3 | COMP 3000 | 3 |
|  | 14 |  | 16 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AITT 3110 | 3 | AITT 4800 | 3 |
| AITT 4040 | 3 | ENGR 4510 | 1 |
| ENGL 3105 | 3 | AITT 4170 | 3 |
| ENGR 4500 | 1 | MGMT 4070 | 3 |
| ENGR 4900 | 1 | 3000-4000 Technical or |  |
| MGMT 4050 | 3 | NON Technical Elective | 6 |
|  | 14 |  | 16 |

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology Aviation Management

## Total: 46 Semester hours

Major Core: (management) A minimum of 46 semester hours including: ENGR 4500, 4510, 4900; AITT 1001,2350, 2500, 3070, 3080, 3110, 3120, 3480, 3700, 3900, 3950, 4020, 4180, 4400.

Core requirements reflect the standards of the Federal Aviation Administration (FAA), Aviation Accreditation Board International (AABI), Association of Technology, Management and Applied Engineering (ATMAE), and the University Aviation Association (UAA).

Suggested Four-Year Plan:
Bachelor of Science Degree in Aeronautical and Industrial Technology Aviation Management - Total 120 Hours

FALL SEMESTER HR. SPRING SEMESTER HR.

| UNIV 1000 | 1 | MATH 1720 | 3 |
| :---: | :---: | :---: | :---: |
| AITT 1001 | 3 | ENGL 1020 | 3 |
| MATH 1710 | 3 | CHEM 1110 | 3 |
| ENGL 1010 | 3 | CHEM 1111 | 1 |
| Humanities/Fine | 3 | Humanities/Fine | 3 |
| ARTS Elective |  | ARTS Elective |  |
| HPER/ROTC/BAND | 1 | HPER/ROTC/BAND | 1 |
|  | 14 |  | 14 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AITT 2350 | 3 | COMM 2200 | 3 |
| AITT 2500 | 3 | PHYS 2020 | 3 |
| PHYS 2010 | 3 | PHYS 2021 | 1 |
| PHYS 2011 | 1 | ACCT 2020 | 3 |
| ACCT 2010 | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | ENGL 2110 | 3 |
|  | 16 |  | 16 |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| COMP 3000 | 3 | MGMT 3010 | 3 |
| ECON 2010 | 3 | AITT 3080 | 3 |
| AITT 3070 | 3 | AITT 3480 | 3 |
| AITT 3120 | 3 | AITT 3950 | 3 |
| Social/Behavioral 3 AITT 3700 |  |  |  |
| Science Elective |  |  | 3 |
|  | 15 |  | 15 |


| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| ENGR 4500 | 1 | ENGR 4510 | 1 |
| ENGR 4900 | 1 | MGMT 4070 | 3 |
| MGMT 4050 | 3 | AITT 4020 | 3 |
| AITT 3110 | 3 | AITT 4180 | 3 |
| ENGL 3105 | 3 | AITT 4400 | 3 |
| AITT 3741 | 3 | AITT 3900 | 3 |
|  | 14 |  | 16 |

Departmental Requirements for Bachelor of Science in Aeronautical and Industrial Technology
Aviation Flight Training 57 Semester hours
Major Core: (flight) A minimum of 57 semester hours including: ENGR 1001, 1011, 1151, 4500, 4510, 4900; AITT 2350, 2500, 2531, 2532, 2533, 3070, 3120, 3480, 3520, 3550, 3560, 3570, 3508, 3600, 3700, 3810, 3900, 3950, 4400.

Core requirements reflect the standards of the Federal Aviation Administration (FAA), Council on Accreditation Board International (ABII), Association of Technology, Management and Applied Engineering (ATMAE), and the University Aviation Association (UAA).
Suggested Four-Year Plan:
Bachelor of Science Degree in Aeronautical and Industrial Technology Aviation Flight Training - Total 120 Hours

FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
UNIV 10001 MATH 1720
AITT 10013 ENGL 10203
MATH 17103 CHEM 11103
ENGL 10103 CHEM 11111
Humanities/Fine 3 Humanities/Fine 3

| ARTS Elective |  | ARTS Elective |  |
| :---: | :---: | :---: | :---: |
| HPER/ROTC/BAND | 1 | HPER/ROTC/BAND | 1 |
|  | 14 |  | 14 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AITT 2350 | 3 | COMM 2200 | 3 |
| AITT 2500 | 3 | AITT 2532 | 1 |
| PHYS 2010 | 3 | AITT 2533 | 1 |
| PHYS 2011 | 1 | PHYS 2020 | 3 |
| ENGL 2110 | 3 | PHYS 2021 | 1 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| AITT 2531 | 1 | AITT 3520 | 3 |
|  |  | ECON 2010 | 3 |
|  | 17 |  | 18 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AITT 3070 | 3 | MGMT 3010 | 3 |
| AITT 3120 | 3 | AITT 3581 | 3 |
| AITT 3550 | 3 | AITT 3700 | 3 |
| Social/Behavioral Science Elective | 3 | AITT 3950 | 3 |
| AITT 3571 | 3 | AITT 3480 | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| AITT 3560 | 3 | ENGR 4510 | 1 |
| ENGR 4500 | 1 | MGMT 4050 | 3 |
| ENGR 4900 | 1 | AITT 3900 | 3 |
| AITT 3601 | 2 | AITT 4400 | 3 |
| AITT 3810 | 3 | 3000 - 4000 Technical or Non-Technical Elective | 4 |
| ENGL 3105 | 3 |  |  |
|  | 13 |  | 14 |

## Course Descriptions <br> Aeronautical \& Industrial Technology (AITT)

AITT 1001 INTRODUCTION TO AERONAUTICAL \& INDUSTRIAL TECHNOLOGY (3). An overview of the subject areas in the Department of Aeronautical \& Industrial Technology. Special attention is given to the areas of Aviation Flight Training, Aviation Management and Industrial Electronics Technology. The student is introduced to student support services, admission and retention standards, probability and statistics, programming and the use of computers for document preparation and simulation studies, and other topics of interest that will assist the student to integrate into his or her chosen curriculum.

AITT 2000, 2001 CIRCUITS ANALYSIS (3-1). Fundamental concepts of change, current, voltage and power, mesh and nodal analysis: Kirchhoff's laws, Thevenin's and Norton's Theorems, superposition, source transformations, natural and forced response of RL, RC and RLC circuits, transient and steady state analysis of linear circuits. Prerequisites: MATH 1720.

AITT 2200, 2201 CIRCUITS AND DEVICES (3-1). A course designed to provide a basic knowledge of electronic and electrical devices including their construction and operation. Topics covered include review of network theorems and linear models of diodes. Prerequisite: AITT 2000, 2001.

AITT 2350 GENERAL AVIATION OPERATIONS (3). Lectures deal with facilities, management, and finance, legal and insurance aspects of general aviation. The lectures focus on sales, line service, air taxi and flight schools. One or more field trips to general aviation operations will be held. A semester project is required.
AITT 2500 FLIGHT FUNDAMENTALS (3). An introduction to the aerospace industry including air transportation and manufacturing with emphasis in primary flight principles, aviation meteorology, navigation and FAA regulations. Weight and balance, engines and airframe overview.

AITT 2531 PRIVATE PILOT FLIGHT I (1). This course consists of flight instruction and ground tutoring necessary for the student to accomplish his/her first solo flight. Lessons include elements of flight principles, pre-and-post flight procedures, taxiing and ground handling, use of flight controls, basic maneuvers, take-offs, and landings. Introduction to aircraft systems, radio communications, and air traffic control procedures. Principal Topics Covered: Consist of flight instruction and ground tutoring for first solo flight. Prerequisite: AITT 2500.

AITT 2532 PRIVATE PILOT FLIGHT II (1). This course is a continuation of Private Pilot Flight I, designed to prepare the student for solo cross-country flight. Lessons provide greater proficiency in maneuvers, stalls, take-offs and landings, and emergency procedures. Introduction to night flight, various types of navigation and VOR tracking. Flight planning, cross-country flying culminating in solo cross-country. Principal Topics Covered: Designed to prepare students for solo cross-country flights. Prerequisite: AITT 2531.

AITT 2533 PRIVATE PILOT FLIGHT III (1). Continuation of Primary Flight II with emphasis on cross-country navigation, flying, flight planning and solo practice to gain proficiency in all basic maneuvers. Lessons include VFR radio and navigation, control of aircraft solely by reference to instruments. Private Pilot qualifications are completed. Principal Topics Covered: AITT 2532: Final preparation (ground tutoring and flight lessons) in preparation for the Federal Aviation Administration Flight Test. Prerequisite: AITT 2532

AITT 3010 STATIC AND STRENGTHS OF MATERIALS (4). Statics of particles and rigid bodies in two and three dimensions. Stress-strain relation, displacements in truss, shafts, and beams. Prerequisite: MATH 1720.

AITT 3070 AVIATION MANAGEMENT (3). A study of the basic and existing practices used in managing and marketing as applied to the aviation industry. Includes problems, current issues and future trendsrelated to aviation operations, planning and economic, and resource considerations.

AITT 3080 AIRPORT MANAGEMENT (3). Introductory course designed to acquaint the student with basic concept of airport planning and management. A comprehensive survey of a typical community with eye toward present and future business potential is made. This includes the social and economic characteristics, the political and governmental influences, and various stages and types of airport construction.

AITT 3090 INDUSTRIAL MATERIALS (3). An overview of the nature, composition and structure of industrial materials with emphasis on application properties, processing and the selection and fabrication of materials into products. Prerequisite: CHEM 1110, 1111

AITT 3110 INDUSTRIAL SAFETY (3). Development of the industrial safety movement, psychology in accident prevention, appraisal of accident cost factors, severity and frequency, job analysis and corrective measures, plant inspection and preventive maintenance, storage and handling of materials, fire prevention, education and training of employees.

AITT 3120 HUMAN FACTORS IN AVIATION (3). A study of the psychological and physiological effects that flight imposes on a pilot and aircrews. Also studied are information processing and display effects on the human being; the ability of flight crews to time-share their cognitive process and react under stress. Included is a study of various control manipulation, sensitivity and ease of movement. Prerequisite: PSYC 2010.

AITT 3140 INDUSTRIAL \& PRODUCT MANAGEMENT (3). The problems of production, planning, controlling money, personnel, materials and machines are studied from the viewpoint of modern total quality control. Prerequisite: AITT 3380.
AITT 3200 INTRODUCTION TO ROBOTICS (3). A study of robot structure, kinematics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisites: MATH 1720, AITT 2000.
AITT 3210 ROBOTICS II (3). A continuation of AIT 3200 and a more advanced study of robot structures, kinetics, dynamics, programming interfacing and applications. Two hours lecture and three hours laboratory. Prerequisite: AITT 3200.

AITT 3250 INTRODUCTION TO CIM (3). A broad-based introduction of the various topics in computer -integrated manufacturing, including general business management, product and process definition, planning and control, factory automation and information resource management.

AITT 3260 CIM II (3). A continuation of AIT 325 and a more advanced study of computer-integrated manufacturing, including general business management, product and process definition, planning and control, factory automation, and information resource management. Prerequisite: AITT 3250.

AITT 3270 MATERIAL REQUIREMENT PLANNING (3). An investigation of computer-based systems, which tie together capacity requirement planning, production planning and scheduling, purchasing inventory management and other processes to control manufacturing operations.

AITT 3280 COMPUTER NUMERICAL CONTROL (3). An introductory study of NC, CNC programming, simulation and tooling. Computeraided programming and simulations.

AITT 3310, 3311 BASIC ELECTRONICS I (3-1). A study of basic electronic principles, circuits, devices. Included are diodes, linear models of bipolar and field effect transistors, biasing, small signal models. Prerequisite: AITT 2200.

AITT 3320, 3321 BASIC ELECTRONICS II (3). Multistage amplifiers, frequency response, feedback, stability, and linear amplifiers are studied. Operational amplifiers and filters are introduced. Prerequisites: AITT 3310, 3311.

AITT 3340 HYDRAULICS \& PNEUMATICS (3). An introductory study of components, circuits and safety of fluid power systems. Basic principles of fluid statics and dynamics. Analysis of functions of components such as distribution systems, pumps, actuators and valves. Hydraulic and pneumatic circuits design and analysis. Fluid power maintenance and safety. Prerequisite: MATH 1720

AITT 3350, 3351 DIGITAL LOGIC SYSTEMS (3-1). Analysis of digital systems, combinational and sequential circuits, and stored program concepts. Prerequisite: AITT 2000, 2001.

AITT 3380 MANUFACTURING TECHNOLOGY (3). Emphasis on the development of skills in planning manufacturing processes, setting up fixtures and operating various machine tools.

AITT 3400 COMMUNICATIONS SYSTEMS TECHNOLOGY (3). Principles of noise, oscillators, modulation, power vacuum tube amplifiers and circuitry. Transmission line and antennas. Prerequisite: AIT 3320.

AITT 3450 ANTENNAS AND TRANSMISSION LINES (3). The principles of transmitting and receiving antennas, applied electromagnetic theory and transmission lines from a practical communications viewpoint. (An Elective Course)
AITT 3480 STATISTICAL QUALITY CONTROL (3). An introduction to the basic statistical methods, control charts, sampling techniques and the implementation of statistical process control programs as relates to today's TQM. Prerequisite: MATH 1720

AITT 3500 RADAR PRINCIPLES (3). An elective course, which examines the principles of radar. Topics include basic radar concepts and installation, radar transmitters and receivers, radar displays, radiation safety and general maintenance and considerations.

AITT 3520 INSTRUMENT GROUND INSTRUCTION (3). A study and review of the operations, regulations (FARs) and procedures necessary to perform competently as an instrument pilot. Prepares students for the instrument pilot written examination. Prerequisite: Private Pilot License or AITT 2500.

AITT 3550 COMMERCIAL GROUND INSTRUCTION (3). Ground instruction covering navigation systems, communications, principals of instrument flying, air traffic control procedures, approach and departure procedures, and FAA regulations. Prerequisite: Private Pilot License.

AITT 3560 FLIGHT INSTRUCTOR GROUND (3). Ground instruction on FAA regulations and publications, weather, advanced flight, computer operations, radio navigation, advanced aircraft and engine performance, and fundamentals of instructing. Prerequisite: Commercial Pilot's License with Instrument Rating.
AITT 3571 INSTRUMENT FLIGHT LAB (3). Flight and simulator training to perfect complex flight maneuvers using aircraft maximum performance and precision control as necessary to perform under instrument weather conditions. Prerequisite: Private Pilot License.

AITT 3581 COMMERCIAL FLIGHT LAB (3). A continuation course of AIT 3571, providing the additional flight and simulator training as required to perform as a commercial pilot with a multi-engine and instrument rating.

AITT 3591 MULTI-ENGINE FLIGHT LAB (1). A continuation course providing the additional flight and simulator training and practice as required to perform as a commercial pilot with a multi-engine and instrument rating.

AITT 3601 CFI FLIGHT LAB (2). A flight training course providing the additional flight, simulator training and practice as required to perform as a flight instructor for single engine airplane training. Prerequisite: Commercial Pilot License, Instrument Rating.

AITT 3700 AVIATION METEOROLOGY (3). Properties and conditions of the atmosphere, landforms and topography leading to an understanding of weather conditions. Prerequisites: PHY 2020, 2021 or consent of the department chair.
AITT 3741, 3742 COOPERATIVE EDUCATION (6). Supervised and approved program and learning experiences undertaken by students in governmental, business or industry setting. Formal proposals, project objectives or learning plans must be reviewed and approved by faculty. Student activity and progress must be monitored, evaluated and graded by an assigned full-time faculty. (An Elective Course) Prerequisite: Consent of the Department Chair.
AITT 3810 THEORY OF FLIGHT \& ENGINES (3). The laws of aerodynamics and nature as applied to aviation. The principals, familiarization and operation of the internal combustion engine and turbine engines.

AITT 3840 AIRCRAFT SYSTEMS ANALYSIS (3). Analysis of structure, mechanical, electrical and hydraulic systems of aircraft. Procedures for inspection, maintenance and repair. Study of appropriate FARs.

AITT 3900 AVIATION LEGISLATION (3). Legal concepts including federal, state and local legislation related to the operations, contracts, insurance and liability, regulatory statues and case law.

AITT 3950 AVIATION SAFETY (3). Major factors affecting the safe operations of aircraft on the ground and airborne. Major problem areas include: program evaluation, impact of accidents on industry, human factors, accident prevention, basic principles of investigation, case surveys of accidents.
AITT 4000 AIRCRAFT STRUCTURAL FACTORS (3). A detailed examination of aircraft development with emphasis on Manufacturing to include designs, materials selection, modification, maintenance and flight-testing. Additional topics include dynamic and static stress testing procedures, design loading, fatigue, and corrosion. Prerequisite: AIT 2500.
AITT 4020 AIRLINE OPERATIONS (3). An in-depth study of U.S. Air Carrier Operations. The economics, organization, and regulation of domestic air carriers are covered in detail. Air Carrier training programs, route structure, sizing a line, and present and future projections are explored within this course. Prerequisite: AITT 3070, 3120, MGMT 3010 or consent of instructor.

AITT 4040 INDUSTRIAL ELECTRONIC CONTROLS (3). Emphasis on the development of different electronic circuits to interface with or control sensors, transducers, motors, robots and other types of industrial machinery. Prerequisite: AITT 2200, 2201,COMP 3000.
AITT 4100 FLUID POWER CONTROL \& INTERFACE (3). A study of fluid power system control using microcomputers, microprocessors and programmable controllers. Prerequisite: COMP 3000, AITT 3340.

AITT 4170 LINEAR INTEGRATED CIRCUITS (3). Ideal operational amplifiers, biasing, ,comparators, oscillators and filters are studied. Phase locked loops are introduced. Prerequisite: AITT 3320, 3321.
AITT 4180 AVIATION MARKETING MANAGEMENT (3). Selling and pricing business aviation services and creative marketing strategy are studied in an analytical approach to advertising, sales force administration, promotion, distribution, retailing, logistics, wholesaling, product planning, price policies, market research and consumer behavior. Prerequisite: AITT 4020, MGMT 3010 or consent of the department chair.
AITT 4200 COMPUTER INTERFACING \& PERIPHERALS (3). Applications of microprocessors to equipment with an emphasis on interfacing equipment. Prerequisite: AITT 4800.
AITT 4210 DATA COMMUNICATIONS (3). An introduction to data communications hardware including synchronous/asynchronous communication, protocol, local area network controllers \& modem. Prerequisite: AITT 4800.

AITT 4300 DIGITAL COMPUTER STRUCTURES (3). Organization and description of computers from the register transfer level through microprogramming, memory organization and I/O examples of current popular computers. Prerequisite: AITT 3350, 3351.

AITT 4400 INTRODUCTION TO AIR TRAFFIC CONTROL (3). A study of the national air traffic control system to include our basic operation procedures, the role of centers, approach control towers, flight service stations, communications, navigation procedures, radar FARs operations, and facilities.

AITT 4410 AIRCRAFT ELECTRICAL SYSTEMS (3). A course which covers the basic fundamentals of aircraft electricity and deals with the design principles and functional operation of aircraft and aerospace electrical accessories and appliances. The course includes basic theories and simulated functional operation of direct current systems and 400 cycle A.C. systems as used in aerospace vehicles. Prerequisite: AITT 2200, 2201.

AITT 4420 AVIONICS (3). A course which covers the principles of electronics and electronic circuits element as used in aircraft and aerospace vehicles for communication, navigation and direction finding equipment. Prerequisite: AITT 3400.

AITT 4640 CFI INSTRUMENTS (3). A flight and ground schooltraining course providing training required to perform as an instructor for instrument training. Prerequisite: Commercial License/Instrument Rating.

AITT 4670 CFI MULTI-ENGINE (3). A flight and ground school training course providing training required to perform as an instructor for multiengine training.

AITT 4781, 4782 SPECIAL TOPICS IN INDUSTRIAL TECHNOLOGY (3). Special subject presented to cover current problems of unique advances in the leading edge of technology. Prerequisites: Senior standing and consent of instructor.

AITT 4800 INTRODUCTION TO MICROPROCESSORS (3). An indepth introduction to microprocessors. Topics covered are microprocessor hardware, software and architecture of both eight bit and sixteen bit machines, assembly on-line debugging tools. Prerequisite: AITT 3350, 3351.

# Department of Civil and Architectural Engineering Program 

Farouk Mishu, Ph.D., P.E. Interim Chair and Professor ET 242 A. P. Torrence Hall<br>Telephone: 615-963-5421

Faculty: F. Mishu, P. Paily, D. Martin, R. Painter, D. Chimba, C. Armwood, D. Denkenberger

General Statement: The Department of Civil and Architectural Engineering at Tennessee State University offers coursework and study pertinent to Civil Engineering and Architectural Engineering. Students completing the program may enter the profession as engineers in civil, structural, architectural, geotechnical, transportation, water resources, environmental, hydraulics, or construction disciplines. Through choice of the proper coursework's, a student has the opportunity to channel academic studies specifically towards his/her career choice.

Graduates of the program may commence their engineering careers in either industry, engineering consulting firms, construction firms or public service at the federal, state, or local level. Initial assignments may include planning, design and implementation of water resources systems; planning and design of transportation and housing systems; regional planning, design, and management for abatement of air, water and solid waste pollution problems; design of bridges and single and multistory structures; mechanical and electrical systems and supervision of construction projects. The Bachelor of Science Degree in Architectural Engineering and the Bachelor of Science Degree in Civil Engineering are accredited by Engineering Accreditation Commission of the Accreditation Board of Engineering and Technology [EAC/ABET]. http://www.abet.org

## Department Mission

The Civil and Architectural Engineering department at Tennessee State University provides students with a supportive learning environment, hands-on experiential opportunities, a culture of scholarship and research, and to prepare them to be successful technical and design professionals. The department strives to enable students to become life-long learners, skillful communicators, and effective practitioners and leaders in a global community.

# Architectural Engineering Program 

ET 242 A. P. Torrence Hall<br>Telephone: 615-963-5421

Faculty: F. Mishu, P. Paily, D. Martin, R. Painter, D. Chimba, C. Armwood, D. Denkenberger

General Statement: The Architectural Engineering program prepares the student to execute, evaluate and complete the engineering analysis, planning, design and construction management of various types of buildings. The four-year curriculum provides a program that emphasizes the fundamentals and design of building systems including structural design, mechanical and electrical systems design, construction management, and architectural design. Using these fundamentals, the student applies engineering science principles to the design of a building infrastructure. This provides the student with an understanding of the design process from planning through construction.

The Program Educational Objectives for the Architectural Engineering program delineate the skills and attributes of graduates within a few years following graduation.

1. Knowledge of physical sciences, mathematics, and engineering sciences to delineate and solve architectural engineering problems using systematic approach.
2. Ability to pursue graduate education in architectural engineering and related fields.
3. Ability to function as members of multi-disciplinary and multicultural teams, and to communicate effectively using available modern tools.

Each graduate from the Architectural Engineering program will demonstrate the following skills and attributes at the time of graduation:
a) The ability to apply knowledge of mathematics, science, and engineering within the framework of solving architectural engineering problems, including the analysis and design of; structural systems for buildings, electrical / mechanical systems for buildings, materials selection and usage, and construction management and operations.
b) The ability to design and conduct experiments, as well as analyze and interpret data pertaining to architectural engineering systems.
c) An ability to design a system, component, or process to meet desired needs including an understanding of codes, standards, and other requirements.
d) An ability to function on multi-disciplinary teams.
e) An ability to identify, formulate, and solve architectural engineering problems.
f) An understanding of professional and ethical responsibility in the practice of architectural engineering.
g) An ability to communicate effectively in written, graphical, and spoken form.
h) The broad education necessary to understand the impact of engineering solutions in a global and societal context as they relate to the architectural engineering profession.
i) A recognition of the need for, and an ability to engage in lifelong learning and continuing education.
j) Knowledge of contemporary issues both within and outside the discipline of architectural engineering.
k) An ability to use the techniques, skills, and modern engineering tools necessary for architectural engineering practice.
I) An ability to comprehend, utilize, and apply codes and standards for engineering analysis and design purposes.
m) A capacity to understand and apply reasonable economic analysis and business principles to engineering solutions.
n) A comprehensive and assured sense of capability of integrating learned skills and attributes to architectural engineering principles and practices.

## Engineering Design Experience

Throughout the Architectural Engineering program curriculum students are afforded design experiences ranging from architectural rudiments to advanced structural, mechanical lighting/power design principles and practices fundamental to engineered buildings and building systems; all students at the freshman level are required to apply building design techniques and methods. Extraordinary opportunities are available through close contact with other engineering courses and research programs offered by the College of Engineering. The Architectural Engineering curriculum integrates technical resources with social and cultural needs.

The Engineering Design Experience provides the Architectural Engineering student with the training that enables him/her to develop the ability to systematically apply Engineering Sciences Fundamentals to the design of engineered buildings, components and systems. The Architectural Engineering program has in place a series of required engineering design courses which are integrated throughout its curriculum.
Graduates of the Architectural Engineering program may find many career opportunities in consulting engineering firms or governmental agencies, construction and management agencies, or continue their education in related graduate programs.
Prior to the senior year students must declare a major emphasis of study and take six credit hours of technical electives in that option.
The minimum number of semester hours required for a Bachelor of Science degree in Architectural Engineering is 128 credit hours.

Suggested Four-Year Plan:

## Bachelor of Science Degree in Architectural Engineering

FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR. ENGL 10103 ENGL 10203
$\begin{array}{llll}\text { MATH } 1910 & 4 & \text { MATH } 1920 & 4\end{array}$
CHEM 11103 PHYS 21103
CHEM 1111 PHYS 2111 1
ENGR 1020 1 COMM 2200 3
ENGR $1151 \quad 1$ AREN 11112
UNIV 1000
AREN 2310


SOPHOMORE YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
MATH 2110
4 MATH 3120
PHYS 21203 CVEN 31203
3
PHYS 2121 1 CVEN 3121 1
ENGR 21103 ENGR 20003
$\begin{array}{llll}\text { ENGR } 2230 & 3 & \text { ENGR } 2001 & 1\end{array}$
$\begin{array}{llll}\text { HIST } 2010 & 3 & \text { ENGR 2120 } & 3 \\ & & \text { ENGR 2010 } & \begin{array}{c}3 \\ \end{array} \\ & & & 17\end{array}$
All students are required to pass the ENGINEERING ENTRANCE EXAMINATION prior to enrolling in upper level (3000-4000) engineering courses.

## JUNIOR YEAR

FALL SEMESTER HR. SPRING SEMESTER HR.
AREN 30113 AREN 3021
CVEN 31003 MEEN 4200 3
AREN 23003 HIST 20203
AREN 34103 Technical Elective (1)
ENGR 43003 AREN 3440 (1) 3
AREN 4430
$\frac{3}{18}$

15

## SENIOR YEAR

FALL SEMESTER HR. SPRING SEMESTER HR.
ENGR 4400 3 AREN 4470 3

ENGR 45001 ENGR 45101
ENGR 49001 Social Sci. Elective (3) 3
Social Sci. Elective (2) 3 Humanities Elective (2) 3
Technical Elective (1)
AREN 3420
CVEN 3400 Humanities Elective
(Literature) (2) 3

ENGR 42010
(1) Two Technical Electives must be chosen from the following options.

| Structural Option |  |  |
| :--- | :--- | :--- |
|  |  | Mechanical Option 3430 |
| AREN 3460 |  | AREN 4220 |
| AREN 4440 |  | AREN 4450 |
| ARE |  | MEEN 4150 |

(2) Social-Behavioral Science and Humanities Elective courses must be chosen from a list of general education courses approved by the University.
(3) Each student of Architectural Engineering is required to participate in an active practicum over an 8 week period one semester with an operational and functional engineering, construction, or architectural firm or company prior to graduation.

## Course Descriptions Architectural Engineering (AREN)

AREN 1111 Architectural Graphics (2). This course represents the first studio design course. Graphic techniques for preliminary presentation of architectural design problems. Emphasis is on the proper representation of the design components, structural systems, materials and other features. Prerequisite: ENGR 1151.
AREN 2300 Building Materials and Construction (3). A study of the materials and construction methods used in the building construction industry. Codes, standards, and guidelines that regulate the manufacture, use as a building component, and installation requirements are included. The course covers the use of sustainable and energy conserving products in the construction of building systems. Sophomore, Autocad and Revit competency.
AREN 2310 Architectural History (3). A survey of architectural styles of the past to the present time. A comparative methodology is applied. Emphasis includes the geographical, geological, climatic, religious, technological, social and political factors. Humanities Elective (Gen. Education)
AREN 3011 Architectural Design I (3). Principles of design and systematic approach to problem solving of architectural design. Emphasis is on building form, spatial relationships, constructability, building location, orientation, and site relationships. Service learning and community based projects are promoted. Prerequisites: AREN 1111.

AREN 3021 Architectural Design II (3). Emphasis on graphical layout and design of engineering components of buildings. Structural, electrical, and mechanical systems are coordinated for general building systems. Architectural composition is coordinated with engineering systems for a holistic approach to building design. Prerequisite: AREN 3011.

AREN 3410 Structural Analysis (3). Reactions, shear forces and moments in determinate structures from gravity and lateral loads, influence lines, moving loads, deflection of beams, trusses and frames, introduction to matrix methods of structural analysis. Prerequisite: CVEN 3120.

AREN 3420 Reinforced Concrete Design (3). Behavior and design of rectangular beams and T-sections and one way slabs for bending, shear and deflection. Topics also include design of columns for axial forces and bending moments, shear and development of reinforcement, and introduction to footing design. Prerequisites: AREN 3410.

AREN 3440 Steel Design (3). The analysis and design of structural steel elements and connections by LRFD Method, including tension members, compression members, beams and columns subjected to axial forces and bending moments. Prerequisite: CVEN 3410.

AREN 3450 Soils and Foundation Engineering 3(3, 0). Introduction to basic soil properties, soil classification, volumetric relationships, compaction, consolidation, shear strength, bearing capacity, stress distribution, settlement analysis and applications of loadings to foundations and retaining structures. Application of principles of soil mechanics to: determination of bearing capacity and settlement of spread footings, mats, single piles and pile groups. Prerequisite: CVEN 3120.

AREN 3460 Wood and Masonry Design (3). The design of wood and masonry structural members and systems using LRFD Method. Prerequisite: CVEN 3120.

AREN 3570 Steel and Reinforced Concrete Design (3). Introduction to the design of structural steel and reinforced concrete members and systems. Behavior and design of beams, slabs, columns, tension member, and footings. Prerequisite: CVEN 3410.

AREN 3580 Advanced Steel and Reinforced Concrete Design (3). Design of structural steel and reinforced concrete members and systems American Institute of Steel Construction (AISC) and American Concrete Institute (ACI) specifications for both lateral and gravity loads. Prerequisite: AREN 3420.
AREN 4420 Building Engineering Systems (3). The course of study is of building water supply and drainage systems; fire safety, security, and acoustics. Pre-requisite: CVEN 3120 and CVEN 3100.

AREN 4430 Lighting and Power Systems for Facilities $3(3,0)$. The study of principles and practices of electrical circuits and related building components intricate to the design and function of buildings and their systems. This incorporates practical application and use of Electrical Codes for the design and sizing of power distribution systems, load characteristics, transformers, motors, generators, and control systems for single-and three-phase systems. Prerequisites: ENGR 2000 and ENGR 2001.

AREN 4440: Foundation Engineering (3). Subsurface exploration, retaining walls, shallow foundations, bearing capacity of soils, spread and combined footings, raft foundations, deep foundations, piles, caissons and piers. Prerequisite: Junior standing and consent of instructor.

AREN 4450 Energy Conservation in Buildings 3(3,0). A course devoted to understanding energy use patterns for commercial, educational, medical, and industrial buildings. Various utility rate structures and the relevant LEED and USGBD standards are explored. Energy auditing techniques along with the effect of operation and maintenance on building energy use are studied. Design projects are required. Prerequisite: Junior Standing.
AREN 4470 Construction Management $3(3,0)$. Refers to the process of managing a team of design and construction professionals for the purpose of delivering construction and engineering services to a client. This means performing this service so as to deliver the project within budget and schedule constraints, while maintaining the prescribed level of quality and safety defined for the project. This course intends to increase student's technical knowledge of advanced project management concepts, but also will strive to assist them in taking a proactive leadership role in identifying and improving value in planning, design, construction and post construction stages of a project and/or program. Pre-requisite: Junior standing and consent of instructor.

# Civil and Environmental Engineering Program 

ET 108, A.P. Torrence Hall<br>(615) 963-5421

Faculty: F. Mishu, P. Paily, D. Martin, R. Painter, D. Chimba, C. Armwood, D. Denkenberger

General Statement: The Civil Engineering program systematically builds upon the knowledge acquired in the study of the physical sciences, mathematics, and engineering sciences to provide students with a broad base knowledge in the various areas of civil engineering and environmental engineering. The program prepares the students for careers in the private and public sectors and/or to pursue graduate study.
The purpose of the civil engineering program is to provide state of the art civil engineering education, hands on instruction and problem solving that are critical to quality of life.

The educational objectives for the Department of Civil and Environmental Engineering are as follows:
a. Have successful and professional careers in civil engineering and related industries demonstrated by career advancement, recognition, and technical competency.
b. Demonstrate continuous learning through professional development, advanced degrees, membership in professional societies, and/or registration during their early career.

Civil engineers are concerned with buildings, dams, railroads, pipelines, bridges, canals, highways, etc. Some branches of civil engineering are: construction Engineering, Environmental Engineering, Geotechnical engineering, structural engineering, transportation engineering and water resource engineering.
The outcomes of the program require that the graduating student demonstrate the following:
a. Ability to apply knowledge of mathematics, science, and engineering;
b. Ability to design and conduct experiments, as well as, to analyze and interpret data;
c Ability to design a system, component, or process to meet needs;
d. Ability to function on multidisciplinary teams;
e. Ability to identify, formulate, and solve engineering problems;
f. Understanding of professional and ethical responsibility;
g. Ability to communicate effectively;
h. Broad education necessary to understand the impact of engineering solutions in a global and societal context;
i. Recognition of the need of an ability to engage in lifelong learning;
j. Knowledge of contemporary issues;
k. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
I. An ability to apply knowledge in environmental engineering, structural engineering, transportation engineering, and water resource management.
m . An ability to explain basic concepts in management, business, public policy and leadership.

## Engineering Design Experience

The engineering design experience is stressed throughout the entire curriculum formally and informally. Open-ended problems are assigned to the students in various courses in order to develop their creativity. Specifically, in ENGR 3200 Introduction to design, a design project problem is assigned which requires formulation, specifications and considerations of alternative solutions by each individual student. In Introduction to Design, the student is introduced to economic analysis and statistical analysis in the context of an engineering design. Design problems become more complex as the Civil Engineering student advances through the curriculum and takes the following design courses: CVEN 3200 Transportation Engineering, CVEN 3250 Hydraulics Engineering, CVEN 3350 Hydrology, CVEN 3420 Reinforced Concrete Design, CVEN 4250 Water and Waste Water Engineering, CVEN 4320 Highway Engineering, and one design elective course.

The student applies the above knowledge in a capstone design of a complete system. The Capstone Design, which consists of two semester sequence of ENGR 4500 and ENGR 4510, is done under the guidance of a faculty advisor or an industrialist and faculty advisor. The student must first present his/her design proposal for acceptance by the advisor and the department chair. Every student is required to make an oral presentation on his/her project to students, faculty, and/or jury of practitioners in a formal setting.
Design Electives:
CVEN 3440 Steel Design
CVEN 4280 Solid Waste Management
CVEN 4350 Hazardous Waste Management
CVEN 4050 Transportation Modeling
CVEN 4090 Traffic Engineering
CVEN 4110 Design Hydraulic Structures
CVEN 4220 Hydrologic Design
CVEN 4430 Advanced reinforced concrete design
Other Engineering courses approved by the department:
The minimum number of semester hours required for a Bachelor of Science Degree in Civil and Environmental Engineering is 128 hours.

Suggested Four Year Plan:
Bachelor of Science Degree in Civil and Environmental Engineering
FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
ENGL 1010
MATH 1910
3 ENGL 1020
3
MATH 1920
CHEM 11103 PHYS 21103
CHEM 1111
PHYS 2111
ENGR 1020
1 ENGR 2230
ENGR 1151
1 Social Science Elective3

UNIV $1000 \quad \frac{1}{14} \quad \frac{}{17}$
SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| COMM 2200 | 3 | ENGR 2120 | 3 |
| ENGR 2110 | 3 | MATH 3120 | 3 |
| MATH 2110 | 4 | CVEN 3120 | 3 |
| PHYS 2120 | 3 | Humanities Elective | 3 |
| PHYS 2121 | 1 | (Literature) (1) |  |
| BIOL 3010 | 2 | CVEN 3121 | 1 |
| BIOL 3011 | 1 | HIST 2010 | 3 |
|  |  |  | 17 |

COMM 22003 ENGR 21203
ENGR 21103
MATH 21104 CVEN 3120
PHYS 2120 Humanities Elective
(Literature) (1)
CVEN 3121
17

EXAMINATION prior to enrolling in upper level 3000/4000 engineering courses.

## JUNIOR YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| CVEN 3000 | 3 | CVEN 3130 | 3 |
| CVEN 3100 | 3 | CVEN 3131 | 1 |
| CVEN 3101 | 1 | CVEN 3200 | 3 |
| CVEN 3400 | 1 | CVEN 3250 | 3 |
| CVEN 3410 | 3 | CVEN 4361 | 1 |
| ENGR 4300 | 3 | CVEN 4520 | 3 |
| ENGR 4400 | 3 | HIST 2020 | 3 |
|  |  |  | 17 |

FALL SEMESTER HR. SPRING SEMESTER HR.
CVEN 42503 CVEN 4470
CVEN 43203 CVEN 33503
CVEN 3420 ENGR 4201 (1) 0
ENGR 45001 ENGR 45101
ENGR 49001 Social Science. Elective 3
Design Tech.
Elective (2)
3 Humanities Elective (1)
3

## 14

Humanities Elective (1) $\qquad$
(1) This elective must be chosen from an approved General Education list of courses.
(2) This elective must be chosen from an approved of design courses.

## Course Descriptions Civil and Environmental Engineering (CVEN)

CVEN 3000 Introduction to Environmental Engineering (3). Understanding of various measures used to identify pollution levels in the environment. Study of population growth and its impacts on environmental sustainability. Methods to recognize, analyze and solve environmental problems related to air, water and soil. Prerequisite: Junior Standing

CVEN 3100 Fluid Mechanics (3). Fluid properties; fluid pressure and pressure forces; fluid flow fundamentals; continuity, Bernoulli and momentum equations for ideal and real fluid flows; concepts of lift and drag. Pre-requisite: ENGR 2110; Co-requisite: ENGR 2120.

CVEN 3101: Fluid Mechanics Laboratory (1). A laboratory course to verify certain theoretical concepts from CVEN 3100 Fluid Mechanics involving pipe flows and open channel flows. One 3 -hour lab per week. Co-requisite: CVEN 3100.

CVEN 3120 Mechanics of Materials (3). Concepts of stress and strain, stress-strain relationships, shear and moment diagrams, shear and moment by integration, torsion in shafts, bending and axial loads on determinate beams, Stress Transformation. Prerequisite: ENGR 2110.

CVEN 3121 Mechanics of Materials Lab (1). A laboratory based on CVEN 3120 lecture material, one 3-hour lab per week. Co-requisite: CVEN 3120.

CVEN 3130 Soil Mechanics (2). Principles of soil mechanics, index properties of soils, particle size and gradation, soil identification and classification, permeability of soils, failure criteria, concept of effective stress in soils, shear strength and shear testing, settlement and consolidation tests. Two lectures per week. Prerequisite: CVEN 3120.

CVEN 3131 Soil Mechanics Lab (1). Laboratory based on CVEN 3130 lecture material, one 3-hour lab per week. Co-requisite: CVEN 3130.

CVEN 3200 Transportation Engineering (3). An introduction to urban and rural transportation problems and the basic fundamentals for design, construction, maintenance and operation of various transportation modes, guideways and terminals. The course also includes introductory material in mass transportation, traffic and accident analysis, and measurement systems. This course will consist of two hours of lecture and three hours of lab. Prerequisite: ENGR 2120.

All students are required to pass the ENGINEERING ENTRANCE

CVEN 3250 Hydraulic Engineering (3). Analysis and design of flow in single and multiple pipes, and uniform and non-uniform flow in open channels; pump performance and pump selection; concept of drag; Prerequisite: CVEN 3100.

CVEN 3350 Hydrology (3). Study of the hydrologic cycle including precipitation, and runoff; hydrograph analysis; methods to estimate peak flows; design of drainage systems and flood control reservoirs. Prerequisites: CVEN 3100.

CVEN 3400 Structural Testing (1). Laboratory course dealing with the measurement of the engineering properties of construction materials. Prerequisite: ENGR 2110

CVEN 3410 Theory of Structures I (3). Reactions, shear forces and moments in determinate structures from gravity and lateral loads, influence lines, moving loads, deflections of beams, trusses and frames, introduction to matrix methods of structural analysis. Prerequisite: CVEN 3120.

CVEN 3420 Reinforced Concrete Design (3). Behavior and design of rectangular beams and T-sections and one way slabs for bending, shear and deflection. Topics also include design of columns for axial forces and bending moments, shear and development of reinforcement, and introduction to footing design. Prerequisite: CVEN 3410.

CVEN 3440 Steel Design (3). The analysis and design of structural steel elements and connections by LRFD Method, including tension members, compression members, beams and columns subjected to axial forces and bending moments. Prerequisite: CVEN 3410.

CVEN 4050 Transportation Modeling (3). Analytical evaluation of trip generation, gravity model, probabilistic models used in trip distribution and assignment; shortest path algorithms, model split calibration and testing of existing models. Prerequisite: CVEN 3200

CVEN 4090 Traffic Engineering (3). A study of traffic congestion, capacity signs and signalization, accident analysis and pedestrian controls using MUTCD guidelines. Prerequisite: CVEN 3200.

CVEN 4110 Design of Hydraulic Structures (3). Principles and procedures for the design of small hydraulic structures including flow measurement structures such as flumes, flow regulation structures such as locks, and discharge structures such as spillways. Computer applications in hydraulic design. Prerequisite: consent of instructor.
CVEN 4220 Hydrologic Design (3). Application of hydrologic principles to the design of urban drainage structures including storm sewers, culverts, detention basins and other minor structures; computer applications in hydrological design. Prerequisite: Consent of instructor.

CVEN 4250 Water and Wastewater Engineering (3). Planning and design of water supply and wastewater collection systems;; water demand; water quality criteria and water treatment processes; treatment and disposal of wastewater. Prerequisites: CVEN 3000, CVEN 3100.

CVEN 4280 Solid Waste Management (3). Quantities and characteristics of solid wastes; collection methods and equipment; recycling of wastes; disposal methods including composting, incineration and sanitary landfills; economics and planning of solid waste management systems. Prerequisite: CVEN 3000.

CVEN 4290 Air Pollution Control (3). Sources of primary and secondary air pollution; production of air pollutants from combustion processes. air pollution control devices; air quality modeling. Prerequisite: CVEN 3000.

CVEN 4320 Highway Engineering (3). An introduction to the concepts of design, construction, and maintenance of highway facilities including the integration and application of various engineering principles and techniques for comprehensive team projects. The course will include an introduction to some of the most recent technologies available and responsive to the needs of highway engineering. Prerequisite: ENGR 2120.

CVEN 4350 Hazardous Waste Management (3). Generation of hazardous wastes by industries; nature and quantities of hazardous wastes; transportation, treatment and disposal; environmental impacts; risk analysis of spills; management of radioactive wastes. Prerequisite: CVEN 3000.

CVEN 4361 Environmental Engineering Laboratory (1). Basics of wet chemical analysis of water samples; titrametric and spectrometric analysis; evaluation of processes such as coagulations, thickening, adsorption and gas transfer, etc. three hours of lab. Prerequisite: CVEN 3000.

CVEN 4430 Advanced Reinforced Concrete Design (3). Floor slab systems including flat slabs and two-way slabs, integrated building unit analysis and design, retaining walls and introduction to prestressed concrete. Prerequisite: CVEN 3420.

CVEN 4440 Foundation Engineering (3). Subsurface exploration, retaining walls, shallow foundations, bearing capacity of soils, spread and combined footings, raft foundations, deep foundations, piles, caissons and piers. Prerequisite: CVEN 3130.

CVEN 4470 Construction Project Management (3). Refers to the process of managing a team of design and construction professionals for the purpose of delivering construction and engineering services to a client. This means performing this service so as to deliver the project within budget and schedule constraints, while maintaining the prescribed level of quality and safety defined for the project. This course intends to increase student's technical knowledge of advanced project management concepts, but also will strive to assist them in taking a proactive leadership role in identifying and improving value in
planning, design, construction and post construction stages of a project and/or program. Pre-requisite: Junior standing and consent of instructor.

CVEN 4520 Civil Engineering Design (3). Civil engineering design implementation in one or more of the following areas: structures, geotechnical, water, environmental, and transportation. Prerequisite: Consent of Instructor.

## Department of Computer Science

Ali Sekmen, PhD², Chair<br>005, McCord Hall<br>(615) 963-5712

Faculty: K. Al Nasr, W. Chen, E. Erdemir, M. Hayes, H. Miao, T. Rogers, G. Shao, F. Yao

General Statement: The Department of Computer Science offers a B.S. degree in Computer Science (CS). The CS program provides the CS majors with a broad based knowledge in various contemporary computer science fields such as Programming Languages, Computer Architectures and Operating Systems, Algorithms, Database Systems, Computer Communications and Networks, Cyber-Security, Artificial Intelligence and Robotics, Computer Vision and Graphics, Bioinformatics and High-Performance Computing, and Software Engineering. The CS program also offers a concentration in Bioinformatics under the B.S. degree.
The mission of the Department of Computer Science, commensurate with the mission of the University and the College of Engineering, is to provide quality Computer Science education, to pursue theoretical and applied research in the critical areas of computer science, and to engage in service to its constituents.

The Program Educational Objectives of the Computer Science Undergraduate Program describe the career and professional accomplishments that the Program is preparing graduates to achieve in three to five years after graduation. These objectives are:

1. To systematically identify, formulate, and solve computer science problems.
2. To apply fundamental knowledge of computer science to develop computing systems for solving real world problems or to pursue graduate studies.
3. To utilize communication and analytical skills to work collaboratively and effectively, including supportive and leadership roles on interdisciplinary teams.
4. To understand and demonstrate professional and ethical conduct in the global society and to demonstrate the desire for professional growth and life-long learning.

The Computer Science Program Outcomes require that the graduating students demonstrate the following:
a. An ability to apply knowledge of computing and mathematics appropriate to the discipline.
b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
c. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs.
d. An ability to function effectively on teams to accomplish a common goal.
e. An understanding of professional, ethical, and social responsibilities.
f. An ability to communicate effectively.
g. An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues.
h. Recognition of the need for and an ability to engage in continuing professional development.
i. An ability to use current techniques, skills, and tools necessary for computing practice.
j. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
k. An ability to apply design and development principles in the construction of software systems of varying complexity.

The B.S. degree program in Computer Science is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (CAC of ABET), http://www.abet.org

The undergraduate program enrollment and the number of graduate over the past five years are as follows:

| Fall | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enrollment | 158 | 160 | 170 | 182 | 216 |
| Graduates | 12 | 15 | 17 | 14 |  |

## Program Requirements

A minimum of 120 semester credit hours are required for completion of the BS degree in Computer Science. The distribution of these credits is outlined below.

| Orientation and General Computer Science | 2 |
| :--- | ---: |
| Communication | 9 |
| Humanities / Fine Arts | 9 |
| Social / Behavioral Sciences | 6 |
| History | 6 |
| Natural Sciences | 12 |
| Mathematics | 18 |
| CS Core courses | 37 |
| Computer Science Electives | 12 |
| Technical Electives | 9 |
|  | 120 |

## Orientation and General Computer Science (2):

1. UNIV 1000 Service to Leadership
2. COMP 1500 Introduction to Computer Science

## Communication (9):

1. ENGL 1010 Freshman English I (3)
2. ENGL 1020 Freshman English II (3)
3. COMM 2200 Public Speaking

Humanities/Fine Arts (9):

1. Humanities/ Fine Arts Elective I (3)
2. Humanities/ Fine Arts Elective II (3)
3. Humanities/ Fine Arts Elective III (3)

Humanities/Fine Arts Electives must be chosen from the General Education list of Humanities and Fine Arts courses approved by the University. One Humanities/Fine Arts Elective
must be chosen from ENGL 2120, 2310, 2012, 2013, 2210,
2320, 2022, or 2023.

## Social/Behavioral Sciences (6):

1. Social Behavioral Science Elective I (3)
2. Social Behavioral Science Elective II

Social Behavioral Science Electives must be chosen from the General Education list of Social and Behavioral Science courses approved by the University.

## History (6):

1. HIST 2010 American History I
2. HIST 2020 American History II
(3)

HIST 2010 OR HIST 2020 may be replaced by HIST 2030.
Natural Sciences (12):
Natural Sciences must be chosen from: PHYS 2110 (3) \&
2111 (1) (or PHYS 2010 (3) \& 2011 (1)), PHYS 2120 (3) \&
2121 (1) (or PHYS 2020 (3) \& 2021 (1)), CHEM 1110 (3) \&
1111 (1), CHEM 1120 (3) \& 1121 (1), BIOL 1110 (3) \& 1111
(1), or BIOL 1120 (3) \& 1121 (1).

Mathematics (18):

1. MATH 1910 Calculus \& Analytic Geometry
2. MATH 1920 Calculus II
3. STAT 3110 Probability and Statistics I or equivalent
4. COMP 3200 Discrete Mathematics
5. MATH Elective (must be 2000 or higher level with approval of academic advisor. Math 2500, 3130, 4500, 4724, 4750, and 4900 are not accepted).

## Computer Science (Core 37):

1. COMP $2140 \quad$ Computer Programming I
2. COMP 2240 Computer Programming II
3. COMP 2400 Computer Organization
4. COMP 3050 Programming Languages
5. COMP 3040

Data Structures
Ethics and Professionalism in Computing
7. COMP 3300 Software Engineering
8. COMP 3310 Data Communication and

Computer Networks
9. COMP 3560 Introduction to Theory of

Computing
10. COMP 4100 Operating Systems
11. COMP 4500 Senior Project I
12. COMP 4510 Senior Project II
13. COMP 4700

Algorithms

## Computer Science Electives (12):

1. COMP 3110 or 31220 or 3130 or 3140 or 3150 (not more than two of those courses are allowed).
2. COMP 1210 and COMP 3000 may not be chosen as a Computer Science elective course.

## Technical Electives (9):

Technical Electives may be chosen from Computer Science, Engineering, Mathematics, Natural Sciences, and Business Information Systems.
a. They must be at the 2000 level or above if chosen from Computer Science or Business Information Systems.
b. They can be also chosen at any level courses from the departments other than Computer Science in the College of Engineering, Technology and Computer Science; however, the credit hours selected from 1000 level should not be more than three (3).
c. They can be any level Natural Science courses.
d. They can be any level Math courses at the 2000 level or above. Math 1115 may also be accepted.
e. Any other courses need to be approved by the Departmental Curriculum Committee.

Important Rules for Elective Courses: All of the elective courses must be chosen in such a way that the total credits at the 3000-4000 levels must be at least 42 credits.

Suggested Four Year Plan:
Bachelor of Science in Computer Science

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Social/Behavioral Sciences ${ }^{(1)}$ | 3 | Natural Science ${ }^{(2)}$ | 4 |
| COMP1500 | 1 | COMP 2240 | 4 |
| COMP 2140 | 4 |  |  |
| UNIV 1000 | 1 |  |  |
|  | 16 |  | 15 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| History ${ }^{(4)}$ | 3 | COMP 2200 | 3 |
| COMM 2400 | 3 | COMP Sci. Elective ${ }^{(5)}$ | 3 |
| Natural Science ${ }^{(2)}$ | 4 | COMP 3200 | 4 |
| Humanities/Fine Arts ${ }^{(3)}$ | 3 | History ${ }^{(4)}$ | 3 |
| COMP 3190 | 2 | Social/Behav. Sci. ${ }^{(1)}$ | 3 |
|  | 15 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| COMP 3040 | 3 | COMP 4100 | 3 |
| COMP 3050 | 3 | COMP 3310 | 3 |
| Natural Science ${ }^{(2)}$ | 4 | (3) | 3 |
|  | 3 | COMP 3560 | 3 |
| COMP 3300 | 3 | STAT 3110 | 3 |
|  | 16 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MATH Elective ${ }^{(6)}$ | 3 | COMP 4510 | 2 |
| COMP 4500 | 1 | COMP Sci. Elective ${ }^{(5)}$ | 3 |
| COMP 4700 | 3 | COMP Sci. Elective ${ }^{(5)}$ | 3 |
| COMP Sci. Elective ${ }^{(5)}$ | 3 | Technical Elective ${ }^{(7)}$ | 3 |
| Technical Elective ${ }^{(1)}$ | 3 | Technical Elective ${ }^{(6)}$ | 3 |
|  | 13 |  | 14 |

## Notes:

1. Social and Behavioral Sciences Electives must be chosen from the General Education list of Social and Behavioral Science courses approved by the University.
2. Natural Science must be chosen from: PHYS 2110 \& 2111 (or PHYS 2010 \& 2011), PHYS 2120 \& 2121 (or PHYS 2020 \& 2021), CHEM 1110 \& 1111, CHEM 1120 \& 1121, BIO 1110 \& 1111 or BIOL 1120 \& 1121.
3. Humanities/Fine Arts Electives must be chosen from the General Education list of Humanities and Fine Arts courses approved by the University. One Humanities/Fine Arts Elective must be chosen from ENGL 2120, 2310, 2012, 2013, 2210, 2320, 2022, or 2023.
4. History must be from the General Education list of History courses approved by the University. They are currently HIST 2010 and HIST 2020. HIST 2030 may replace HIST 2010 or HIST 2020.
5. At least one of COMP 3110 or 31220 or 3130 or 3140 or 3150 must be taken (not more than two of those courses are allowed). COMP 1210 and COMP 3000 may not be chosen as a Computer Science Elective course.
6. MATH elective must be 2000 or higher level with approval of academic advisor. MATH 2500, 3130, 4500, 4724, 4750, 4900 are not accepted.
7. Technical Electives may be chosen from Computer Science, Engineering, Mathematics, Natural Sciences, and Business Information Systems.
a. They can be also chosen at any level courses from the departments other than Computer Science in the College of Engineering, Technology and Computer Science; however, the credit hours selected from 1000 level should not be more than three (3).
b. They can be any level Natural Science courses.
c. They can be any level Math courses at the 2000 level or above. Math 1115 may also be accepted.

Important: All of the elective courses must be chosen in such a way that the total credits at the 3000-4000 level must be at least 42 credits.

Suggested Four Year Plan:
Bachelor of Science in Computer Science with Concentration in Bioinformatics

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Social/Behavioral Sciences ${ }^{(1)}$ | 3 | BIOL 1110/1111 | 4 |
| COMP1500 | 1 | COMP 2240 | 4 |
| COMP 2140 | 4 |  |  |
| UNIV 1000 | 1 |  |  |
|  | 16 |  | 15 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| History ${ }^{(4)}$ | 3 | COMP 2200 | 3 |
| COMM 2400 | 3 | COMP 3710 | 3 |
| Natural Science ${ }^{(2)}$ | 4 | COMP 3200 | 4 |
| Humanities/Fine Arts ${ }^{(3)}$ | 3 | History ${ }^{(4)}$ | 3 |
| COMP 3190 | 2 | Social/Behav. Sci. ${ }^{(1)}$ | 3 |
|  | 15 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| COMP 3040 | 3 | COMP 4100 | 3 |
| COMP 3050 | 3 | COMP 3310 | 3 |
| BIOL 4110/4111 | 4 | Humanities/Fine Arts | 3 |
| (3) ${ }^{\text {a }}$ ( ${ }^{\text {a }}$ | 3 | COMP 3560 | 3 |
| COMP 3300 | 3 | COMP 3112/3113 | 4 |
|  | 16 |  | 16 |

FALL SEMESTER
SENIOR YEAR
MATH Elective ${ }^{(6)}$
COMP 4500
HR. SPRING SEMESTER
3 COMP 4510
COMP 4700
STAT 3110
COMP 4820

COMP Sci. Elective ${ }^{(\text {b) }} 3$
COMP Sci. Elective ${ }^{(b)} 3$
Technical Elective ${ }^{(7)} \quad 3$
Technical Elective ${ }^{(1)} \quad \frac{2}{13}$

## Notes:

(1) Social and Behavioral Sciences Electives must be chosen from the General Education list of Social and Behavioral Science course approved by the University.
(2) Natural Sciences must be chosen from: PHYS 2110 \& 2111 (or PHYS 2010 \& 2011), PHYS 2120 \& 2121 (or PHYS 2020 \& 2021), CHEM 1110 \& 1111, CHEM 1120 \& 1121, or BIOL 1120 \& 1121.
(3) Humanities/Fine Arts Electives must be chosen from the General Education list of Humanities and Fine Arts courses approved by the University. One Humanities/ Fine Arts Elective must be chosen from ENGL 2120, 2310, 2012, 2013, 2210, 2320, 2022, or 2023.
(4) History must be from the General Education list of History courses approved by the University. They are currently HIST 2010 and HIST 2020. HIST 2030 may replace HIST 2010 or HIST 2020.
(5) At least one of COMP 3110 or 31220 or 3130 or 3140 or 3150 must be taken (not more than two of those courses are allowed). COMP 1210 and COMP 3000 may not be chosen as a Computer Science Elective course.
(6) MATH Elective must be 2000 or higher level with approval of academic advisor. MATH 2500, 3130, 4500, 4724, 4750, 4900 are not accepted.
(7) Technical Electives may be chosen from Computer Science, Engineering, Mathematics, Natural Sciences, and Business Information Systems.
a. They can be chosen at any level courses from the departments other than Computer Science in the College of Engineering, Technology and Computer Science; however, the credit hours selected from 1000 level should not be more than three (3).
b. They can be any level Natural Science courses.
c. They can be any level Math courses at the 2000 level or above. Math 1115 may also be accepted.
(8) Students in Bioinformatics Concentration are required to complete a Bioinformatics related research project for COMP 4500 Senior Project I and COMP 4510 Senior Project II courses.

Important: All of the elective courses must be chosen in such a way that the total credits at the 3000-4000 level must be at least 42 credits.

## Course Descriptions Computer Science (COMP)

COMP 1210 Introduction to Computing (3). This course is for non-CS majors. The purpose is to introduce students to computer hardware and use. Topics covered include: Computer hardware, operating systems and some of the commonly used application software such as a word Processor, an Internet browser, an email manager, a presentation manager and a spreadsheet processor. Course includes hands-on work with computers. Not open to CS majors.

COMP 1500 Introduction to Computer Science (1). The purpose is to introduce students to essentials of computer hardware and software, concept of operating systems and problem modeling and solving. Topics to be offered are number representations, computer memory and data storage methods, basic digital logic, problem modeling and solving, introduction to algorithm development, basic programming skills, basics of computer operating systems, and current issues relating computing to society presented.
COMP 2140 Computer Programming I (4). This course is designed to introduce programming fundamentals. Students will learn to write programs involving variable storage, formatted input/output, control structures, program repetition, logical operations, functions, file interaction, elementary data types including array and string, and aggregated data types defined by struct. Students are required to use computer labs.

COMP 2240 Computer Programming II (4). This course will continue to develop programming skills and focus on Object Oriented design. Topics include constructors, destructors, operator overloading, inheritance and polymorphism, exception handling, and multidimensional arrays of aggregated data. Students are required to use computer lab. Prerequisite: COMP 2140 or equivalent.
COMP 2400 Computer Organization (3). This course introduces the structures and working principles of the different hardware units of a computer. Computer systems organization, the digital logic level (gates and circuits, memory), micro-architecture level (data path, microinstructions), instruction set architecture level (instruction format, addressing), basics of assembly language, and parallel computer architectures are discussed. Prerequisites: COMP 1500 or one semester of programming.

COMP 2600 Assembly Language (3). This course introduces low level programming through an assembly programming language. Topics include: quick review of main memory and CPU, use of memory, data types, data processing, addressing, compilation and linking processes. Prerequisite: COMP 2400.
COMP 2630 Selected Programming Languages (1-3). The purpose of this course is to teach all components of a selected programming language. Some of the languages to be offered are Visual Basic, C, Unix shell programming, Python, and Prolog. Prerequisite: COMP 2140.

COMP 3000 Computer Programming for non-CS majors (3). This course is a computer programming for non-CS majors. Topics covered include: Introduction to computer hardware, problem solving and algorithm development, and implementation of-algorithms using an object oriented programming language. Schedule will include two (2) lecture hours and one (1) lab hour.

COMP 3030 Windows Programming (3). This course introduces basics of windows programming, web programming and data driven programming using an event driven paradigm. Topics discussed include: language facilities for event driven programming, .NET frame class hierarchy, delegate, events and event handling, graphic user interface, graphics device context, I/O with files and database and web applications. Prerequisite: COMP 2240 or equivalent.

COMP 3040 Data Structures (3). This course introduces elementary and abstract data structures. Topics discussed are: array and linked list, hash table, binary tree, heap, stack, FIFO queue, dynamic dictionary, priority queues, graph, and some sorting and searching algorithms and their implementations. Prerequisite: COMP 2240.

COMP 3050 Programming Languages (3). This course exposes students to various programming languages, their structures and characteristics. The course provides an overview of key concepts used in developing modern programming languages. Programming language principles and paradigms will be introduced by highlighting several programming languages (such as Lisp/Prolog, Python, and Java) so that students will be able to choose an appropriate programming language to solve a particular problem. The course will increase the capacity to use existing languages and learn new languages. Prerequisite: COMP 2240 or equivalent.

COMP 3110 Java Programming (3). Object-oriented programming concepts including classes, interfaces, inheritance, and polymorphism are emphasized using Java programming language. An overview of
more advanced programming concepts including database connectivity, multi-threading, and networking is given. Students are expected to work in teams to design and implement a software system as a semester project. Prerequisite: COMP 2140 or equivalent or approval of the instructor.

COMP 3112/3113 Introduction to Bioinformatics (4). Bioinformatics is an interdisciplinary field in which biology and computer science merge. This course is designed to introduce students with basic concepts, methods and tools to analyze biological problems, prepare students with skills necessary to communicate across the fields of computer science and biology. Topics include (but not limited to) biological sequence and literature databases, strategies to search these databases to solve significant biological problems, principle and algorithms used in analysis of sequence problems. Prerequisite: BIOL 1110/1111 and COMP 2140.

COMP 3120 C++ Programming (3). This course will provide a broad introduction to C++ programming language and focus on object oriented design. It will start the syntax of C++ for elementary language structures and data types such as operators, conditions, loops, strings and array. The main topics include pointers, destructors, operator over-loading, inheritance and polymorphism, exception handling, multi-dimensional arrays and dynamic memory allocation. Students are required to use computer lab. Prerequisite: COMP 2140 or equivalent.

COMP 3130 C Programming (3). This course provides a broad introduction to the $C$ programming language. The course aims to teach the syntax and use of major constructs of the C language and will focus on problem solving and algorithm implementation using a universal subset of the C programming language. Some of these constructs include: conditional statements, loops, functions, operators, unions, arrays, pointers, strings, structures, and file I/O, problemsolving and algorithm design. Students are expected to learn how to program through hands-on exercises and project. Prerequisite: Comp 2140 or Equivalent.

COMP 3140 Python Programming (3). This course will introduce the fundamental techniques of programming using Python. Topics covered include the basics and syntax of the language, introduction to object-oriented programming, and data and information processing. The course aims at expose the students to algorithmic and procedural problem solving using Python. This course is intended for persons with a prior background in any programming language. Prerequisite: COMP 2140 or equivalent.

COMP 3150 COBOL Programming (3). This course provides a broad introduction to the programming concepts and to the widely used business language, Common Business-Oriented Language (COBOL). The course aims to teach the syntax and use of major constructs of the COBOL language and will focus on problem solving and algorithm implementation using a universal subset of the COBOL Programming Language. Prerequisite: Comp 2140 or Equivalent.

COMP 3170 Applied Operating Systems (1-3). This course is designed for presenting advanced features of some commonly used operating systems and their uses. It can be taken more than one time, provided each time a different operating system is taught. Examples of operating systems to be offered are Mac OS, LINUX, and Solaris. Prerequisite: COMP 2400.

COMP 3185/86/87/88 Cooperative Education (3). This course is to provide students with the opportunity applying the knowledge, skills and abilities gained in classrooms and labs in Computer Science into real-world work. Students undertake learning projects in governmental, business, industry, or university settings. Formal proposals, project objectives, and learning plans must be reviewed and approved by faculty advisor. Student activities and progress are monitored, evaluated and graded by an assigned faculty. Prerequisite: Approved by the Department Chair.

COMP 3190 Ethics and Professionalism in Computing (2). This course presents the important topics of communications and ethics for computer professionals. Topics discussed include: Introduction and definitions, ethics for computing professionals and computer users, computer and Internet crime- privacy, freedom of expression, intellectual property, security, and the Software Engineering Code of Ethics and Professional Practice.

COMP 3200 Discrete Mathematics (4). This course presents discrete mathematical structures needed for computer science. Topics include: logic and methods of proof, structures of sets and functions, fundamentals of algorithms, relations, permutations and combinations, discrete probability, graphs and trees and their applications, introduction to mathematical structures such as modular arithmetic, groups, ring, and field. Prerequisite: Math 1910 or COMP 2140 or equivalent.

COMP 3230 Information Systems Analysis (3). This course provides a comprehensive discussion of analysis and design of information systems. It discusses information systems from multiple perspectives including system specifications, logical and physical design, database selection, integration, performance, prototyping, and deployment. Prerequisite: COMP 2240.

COMP 3300 Software Engineering (3). A practical understanding of all phases of software development including system design and analysis is provided. The software life cycle including software specification, design, implementation, verification, and evolution is investigated in detail. Students are expected to work in teams to design, analyze, and partially implement a large-scale software system as semester project. Prerequisite: COMP 2240 or equivalent.

COMP 3310 Data Communications and Computer Networks (3). This course presents basic concepts of data communications and computer networks. Topics include: Definitions, signals, encoding and modulation, analog and digital data transmission and transmission media, error detection and control, types of networks, structure of an open network model, data link and data link protocols, Internet protocol, routing and routing algorithms, and security issues. Prerequisite: COMP 2400.

COMP 3410 Advanced Computer Organization (3). This course focuses on advanced computer organization and architecture. Topics include RISC and CISC architectures, 1-bus and multi-bus processor design, pipelining, microprogramming, memory system, and performance measures. Students will work in teams on design projects. Prerequisite: COMP 2400.

COMP 3500 Digital Logic Design (3). A comprehensive introduction to the digital logic design theory, techniques, simulations, and practical applications. The course covers combinational and sequential logic networks, network reduction, adders, multipliers, decoders, multiplexers, shifters, counters, latches and flip-flops, finite-state machines, and arithmetic logic units. Students are expected to work in laboratory in teams to design and implement some logic networks. Prerequisite: COMP 2400 or equivalent.

COMP 3560 Introduction to Theory of Computing (3). This course presents various models of computation and the relationships between these models and various classes of languages. Topics include: finite automata, regular languages, context-free languages, Turing machines, complexity and limits of algorithmic computation, new computation paradigms. These topics are used as a basis for exploring computability, complexity, and more advanced areas of theory. Prerequisite: COMP 3200.

COMP 3650 Microprocessors (3). This course presents the architecture and instruction sets of different microprocessors and microcontrollers, and the application system design based on these processors. The contents contain the architecture and memory interfacing, interfacing I/O devices, instruction sets, addressing modes, assembly language programming, interrupts, timing diagram, microprocessor application, for microprocessors, microcontrollers, and general purpose processors. Prerequisites: COMP 2400.

COMP 3710 Relational Databases (3). This course presents basic principles of relational databases and a relational database management system. Topics include basic definitions of database systems, relations and their operations, design of and implementation of a relational database, creating queries and the SQL (structured Query Language). Prerequisite: COMP 2140.
COMP 3900 Numerical Analysis (3). This course is for programming some scientific problems including solutions of non-linear equation and simultaneous linear equations, matrix related computations, numerical differentiation and integration, interpolation and approximation. Prerequisites: MATH 3610 or equivalent.

COMP 4100 Operating Systems (3). This course presents both theory and practical lab exercises of operating systems. The course will start with a brief historical perspective of the evolution of operating systems over last five decades and then cove the major components of the most operating systems. Particular emphasis will be given to five core components of OS: process management, memory management, inter-process communication, file systems, and I/O manager. The lab exercises are based on Linux and Mac OS. Prerequisites: COMP 2400.

COMP 4200 Compiler Construction (3). This course is for teaching fundamentals of developing compilers for programming languages. Topics include: lexical analysis, parsing, semantic analysis and code generation. Prerequisites: COMP 3560.

COMP 4280 Web-based Application Development (3). This course is an introduction to current Web technologies. Contents include basic XHTML, CSSs, Client-Side programming, and advanced ASP.NET, Students are required to implement several Web-based projects. It also provides a practical training to senior undergraduate to enhance their programming skills and information processing skills. Prerequisite: COMP 2240.

COMP 4400 Artificial Intelligence (3). This course is a study to the design of computer systems that exhibit traits normally associated with intelligence in human behavior, such as the ability to understand natural language, to reason about the visual environment, and to solve complex problems. Topics includes knowledge representation formalisms and search techniques, natural language processing, logic and theorem proving, expert systems, planning, vision, machine learning, neural networks, and genetic algorithms. Prerequisite: COMP 3040.

COMP 4440 Mobile Robotics (3). This course provides students with hands-on experience in mobile robot design, implementation, and testing. It covers mobile robot topics such as robot hardware, robot sensing, actuation, embedded system programming, and algorithms for localization, path planning, and mapping. It briefly covers multirobot systems. Students are expected to work in laboratory in teams to build and test increasingly complex LEGO-based mobile robots and compete in an end-of-semester robot contest. Prerequisite: COMP 2140 or equivalent.

COMP 4450 Computer Network Architecture (3). This course presents basic concepts of computer network architectures and devices. Topics include: Network layers and services types, circuit switching, bridges, routers, control signaling, traffic control, architectures of LANs, MANs, WANs, digital network and wireless and mobile networks. Prerequisite: COMP 3310.

COMP 4500 Senior Project I (1). An opportunity for students to integrate the theory, knowledge, design and analysis ability, and programming skills gained in previous computer science work into a team-based project carried out under the supervision of a member of the Computer Science faculty. Senior project I leads to the completion of the project in COMP-4510. Students are required to develop a written technical partial report as well as an oral status report. Prerequisite: Graduating Senior.

COMP 4510 Senior Project II (2). Continuation of senior project I leading to completion of the project. Students are required to develop a written technical report and have an oral defense of the project. Prerequisite: COMP 4500.
COMP 4550 Computer Network Protocols (3). This course presents concepts of computer network protocols. Topics include: Basic flow control, MAC, routing protocols, transport, contention, redundancy checks, encryption and decryption, Ethernet and Internet protocols, protocols of wireless and mobile networks. Prerequisites: COMP 4450

COMP 4600 Game Programming (3). This course introduces the basic concepts of computer gaming and problem-solving in the context of computer games. The concepts and techniques that students will learn are also core concepts in computer programming and basic problem solving strategies. These concepts and strategies are not limited to game programming, but also applicable to other applications. The students will implement their game projects on various environments such as Windows PC and the state-of-the-art mobile devices. Prerequisite: COMP 2240.

COMP 4610 Object Oriented and Hybrid Database Systems (3). This course presents Object Oriented and hybrid database concepts. Topics include: definitions of objects and attributes, methods and messages, classes, object-oriented data models, architectural issues, the object-oriented database system manifesto, object-oriented database design, object-oriented database management systems, and object/relational database management systems. Prerequisite: COMP 3710.

COMP 4700 Algorithms (3). This course is to teach the principle of design, analysis, and implementation of algorithms. Topics include: algorithm complexity, mathematical tool for analyzing algorithm complexity, algorithm design techniques, such as divide-and-conquer, dynamic programming, and heuristics, fundamental algorithms, such as sorting, searching, and pattern matching, selected advanced data structures and algorithms. Prerequisites: COMP 3040 and COMP 3200.

COMP 4720 Cryptography and Computer Security (3). This course provides an introduction to modern cryptography and its applications in computer and network security. Topics includes mathematics in cryptography, attack and threaten models and security goals, traditional cryptography, modern cryptography, design of private and public key encryption schemes, digital signatures, authentication and key management, and selected applications. Prerequisite: COMP 3200 or equivalent.

COMP 4750 Computer Network Management (3). This course presents basic concepts of computer network management and tools. Topics include: Network interfacing, measuring failures and availability, reliability, security, maintenance, network statistics, reconfiguration and documentation. Prerequisites: COMP 3310.
COMP 4800 Computer Graphics (3). This course presents basics, including mathematical topics used in writing graphics software. Topics include: Introduction, passive and interactive computer graphics, hardware, user languages and output devices, transformations, algorithms, object modeling, storage and manipulations and image processing. Prerequisite: COMP 2240.

COMP 4820 Introduction to Bioinformatics Computing (3). This course presents fundamental theory and practical skills for biological information processing. Topics include bioinformatics-oriented programming, data base, data structures, algorithms, visualization tools, hands-on training. Prerequisite: COMP 3112/3113 or BIOL 4112/4113.

COMP 4910 Special Topics (1-3). This course is for teaching important emerging computer science topics that are not covered in other CS courses. Prerequisites: junior or senior status and successful completion of at least 18 hours of CS courses.

# Department of Electrical and Computer Engineering 

Satinderpaul Singh Devgan, Ph.D., P.E., Department Chair<br>ET-214F A.P. Torrence Hall<br>(615) 963-5362

Faculty: M. Bodruzzaman, S. Jeffrey Fan, L. Hong, L. Keel, D.R. Marpaka, S. Shetty, M.S. Zein-Sabatto, C. McCurry

General Statement: The mission of the Department of Electrical and Computer Engineering, commensurate with the mission of the University and the College of Engineering is to provide quality Electrical Engineering, Computer and Information Systems Engineering, and Biomedical Engineering education, to pursue basic and applied research (inquiry) in selected and focused critical areas, and to engage in service to its constituents.
The program in electrical engineering systematically builds upon the knowledge acquired in basic sciences, mathematics, and engineering sciences to provide the students a broad base in the various areas of electrical engineering. The
program also offers a concentration in Computer Engineering under the B.S.E.E. degree. The program offers courses in electrical circuits, linear systems, computer programming, electronics, control systems, energy conversion, power systems, electromagnetic theory, communication systems, digital logic design, software engineering, computer structures and microprocessors.

The students may further specialize in one among the areas of control systems, communication systems, power systems, or computer engineering through a choice of technical electives.

The educational objectives of the program are as follows:
The goal of the Department of Electrical and Computer Engineering at Tennessee State University is to offer a high quality, broad-based program in electrical engineering, complemented by basic and applied research and public service to prepare its graduates for starting positions in industry, government and/or pursue graduate study in related fields. The Program Educational Objectives (PEO) of the Electrical Engineering (BSEE) program define the characteristics of most of its graduates about 4-6 years after graduation:

1. Graduates will be engaged in multidisciplinary engineering activities demonstrating, technological advancement in electrical engineering, continuous learning, professional development, or pursuit of advanced degrees
2. Graduates will actively participate in professional and community activities

The student outcomes of the program require that the graduating student demonstrate the following:
a. an ability to systematically apply knowledge of mathematics, science and engineering sciences to solve problems
b. an ability to plan, design, and conduct engineering experiments as well as to analyze and interpret data and report results
6. an ability to systematically identify, formulate, design and demonstrate electrical engineering systems, subsystems, components and/or processes that meet desired need within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
d. an ability to function on multidisciplinary teams
e. an ability to identify, formulate and solve engineering and electrical engineering problems
f. an understanding of professional and ethical responsibility
g. an ability to communicate technical information through professional quality reports, oral presentations and interaction with audience
h. the broad education necessary to understand the impact of electrical engineering solutions in a global economic, environmental, and societal context
i. a recognition of the need for and an ability to engage in life-long learning
j. a knowledge of contemporary issues
k. an ability to use modern techniques, skills and tools including computer based tools for analysis and design
Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision making process (often iterative). The fundamental elements of the design process are the establishment of objectives and
criteria, synthesis, construction, testing and evaluation and should include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics and social impact.

Engineering design experience is integrated throughout the curriculum, starting with definition of engineering and engineering design in ENGR 1020 Freshman Engineering Seminar in the freshman year. Design experience continues in the sophomore year with ENGR 2250 Transport Phenomena and ENGR 2110 Statics courses. In the junior year, design process and methodology are covered in a required ENGR 3200 Introduction to Design course that covers development of specifications, realistic constraints and consideration of alternate feasible solutions leading to design projects. During junior and senior years, design experiences are continued through required design projects in EECE 2120 Circuits II, EECE 3100, 3101 Design of Digital Logic Systems and Lab., EECE 3300, 3301 Electronics and Lab., EECE 3410 Energy Conversion, EECE 3420 Power Systems, EECE 4000, 4001 Control Systems I and Lab., EECE 3500 Communication Systems, EECE 4300 Digital Computer Structures, EECE 4310 Software Engineering, EECE 4800 Introduction to Microprocessors and group design projects in EECE 4101 Electrical Systems Design Laboratory ( $100 \%$ design) courses. These design experiences lead to a culminating major, meaningful design experience in a required two semester sequence of program specific ENGR 4500, ENGR 4510 Capstone Design Project I, II courses in the senior year. Students' communication skills are also developed through required written reports in laboratory courses, design project reports, formal oral presentation and bound written report for ENGR 4510 - Capstone Design Project II course.
The B. S. degree program in Electrical Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC of ABET), http://www.abet.org.
The undergraduate program enrollment and the number of graduate over the past five years are:

## Enrollment and Degrees Awarded Department of Electrical and Computer Engineering

| Fall | 2011 | 2012 | 2013 | 2014 | 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enrollment | 120 | 116 | 146 | 229 | 202 |
| Degrees Awarded | 12 | 9 | 8 | 12 |  |

## Departmental Requirements for Bachelor of Science Electrical Engineering 128 Semester Hours

Major Core: A minimum of 38 semester hours including: EECE 2120, 3061, 3100, 3101, 3200, 3210, 3300, 3301, 3410, 3420, 3500, 4000, 4001, 4101; Guided Electives.
Major Core for Concentration in Computers Engineering: A minimum of 38 semester hours including: EECE 2120, 3061, $3100,3101,3200,3210,3300,3301,3500,4101,4300,4310$, 4360, 4361, 4800; Guided Elective.
Technical Electives: A minimum of 6 semester hours. Choose two from the following with the approval of the advisor: EECE 3330, 3430, 4020, 4100, 4150, 4350, 4410, 4600, 4800. Only 3 credit hours of technical electives are needed for concentration in computer engineering.

## Suggested Four Year Plan:

## Bachelor of Science in Electrical Engineering

FRESHMAN YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
ENGL 10103
MATH 19104 MATH 1920 4
CHEM 11103
CHEM $1111 \quad 1 \quad$ PHYS $2111 \quad 1$
$\begin{array}{llll}\text { ENGR } 1151 & 1 & \text { Humanities Elective (2) } & 3 \\ \text { ENGR } 1020 & 1 & \text { COMM 2200 } & 3\end{array}$
UNIV $1000 \quad \frac{1}{14} \quad 3$

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MATH 2110 | 4 | MATH 3120 | 3 |
| PHYS 2120 | 3 | ENGR 2000 | 3 |
| PHYS 2121 | 1 | ENGR 2001 | 1 |
| ENGR 2110 | 3 | ENGR 2120 | 3 |
| ENGR 2230 | 3 | ENGR 2250 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
|  | 17 |  | 16 |
| All students are required to pass the ENGINEERING EXAMINATION prior to enrolling in upper level engineering courses. |  |  | ENTRANC <br> (3000-4000) |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| EECE 2120 | 3 | EECE 3200 | 3 |
| EECE 3100 | 3 | EECE 3300 | 3 |
| EECE 3101 | 1 | EECE 3301 | 1 |
| ENGR 3200 | 3 | EECE 3210 | 3 |
| ENGR 3300 | 2 | ENGR 3400 | 3 |
| EECE 3061 | 1 | ENGL 2110 or 2310 | 3 |
| ENGR 4400 | 3 |  |  |
|  | 16 |  | 16 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| EECE 3410 | 3 | EECE 3420 | 3 |
| EECE 3500 | 3 | ENGR 4510 | 1 |
| EECE 4000 | 3 | ENGR 4900 | 1 |
| EECE 4001 | 1 | Technical Elective (1) | 3 |
| EECE 4101 | 1 | Technical Elective (1) | 3 |
| ENGR 4500 | 1 | Humanities Elective (2) | 3 |
| ENGR 4201 (3) | 0 | Social Science Elective (2) | 3 |
| Social Science Elective (2) | 3 |  |  |
|  | 15 |  | 17 |

(1) Technical and design electives must be chosen from the following courses with approval from advisor. (EECE 3330, 3430, 4020, 4100, 4150, 4300, 4310, 4350, 4360. 4361, 4410, 4600, 4800)
(2) Social Science and Humanities Electives must be chosen from an approved list of general education courses.
(3) Students must take ENGR 4201 EIT/FE Review Laboratory course and pass it with satisfactory grade. They are encouraged to take the Fundamentals of Engineering Examination with the consent of the department chair.
(4) Students must provide proof of practicum experience of a minimum of continuous eight (8) weeks.
(5) Students must also take the ETS examination in the Final year.

Suggested Four Year Plan:
Bachelor of Science in Electrical Engineering with Concentration in Computer Engineering

FRESHMAN YEAR
$\begin{array}{lclc}\text { FALL SEMESTER } & \text { HR. } & \text { SPRING SEMESTER } & \text { HR. } \\ \text { ENGL 1010 } & 3 & \text { ENGL 1020 } & 3 \\ \text { MATH 1910 } & 4 & \text { MATH 1920 } & 4 \\ \text { CHEM 1110 } & 3 & \text { PHYS 2110 } & 3 \\ \text { CHEM 1111 } & 1 & \text { PHYS 2111 } & 1 \\ \text { ENGR 1151 } & 1 & \text { Humanities Elective (2) } & 3 \\ \text { ENGR 1020 } & 1 & \text { COMM 2200 } & 3 \\ \text { UNIV 1000 } & 1 & & \\ & 14 & & 17\end{array}$

## SOPHOMORE YEAR

FALL SEMESTER HR. SPRING SEMESTER HR. MATH $2120 \quad 4$ MATH 3120 3 PHYS 21103 ENGR 20003

All students are required to pass the ENGINEERING ENTRANCE EXAMINATION prior to enrolling in upper level (3000-4000) engineering courses.

FALL SEMESTER

| JUNIOR YEAR |  |  |
| :---: | :---: | :---: |
| HR. | SPRING SEMESTER | HR. |
| 3 | EECE 3200 | 3 |
| 3 | EECE 3300 | 3 |
| 1 | EECE 3301 | 1 |
| 3 | EECE 3210 | 3 |
| 2 | ENGR 3400 | 3 |
| 1 |  |  |
| 3 | ENGL 2110 or 2310 | 3 |
| 16 |  | 16 |
| SENIOR YEAR |  |  |
| HR. | SPRING SEMESTER | HR. |
| 3 | EECE 4310 | 3 |
| 3 | EECE 4800 | 3 |
| 1 | ENGR 4510 | 1 |
| 1 | ENGR 4900 | 1 |
| 0 | Technical Elective (1) | 3 |
| 3 | Social Science Elective <br> (2) | 3 |
| 3 | Humanities Elective (2) | 3 |
| 1 |  |  |
| 15 |  | 17 |

(1) Technical and design electives must be chosen from the following courses with approval from advisor. (EECE 3330, 3420, $3430,4020,4100,4150,4350,4410,4600)$.
(2) Social Science and Humanities Electives must be chosen from an approved list of general education courses.
(3) Students must take ENGR 4201 EIT/FE Review Laboratory course and pass it with satisfactory grade. They are encouraged to take the Fundamentals of Engineering Examination with the consent of the department chair.
(4) Students must provide proof of practicum experience of a minimum of continuous eight (8) weeks.
(5) Student must also take the ETS examination in the Final year.

## Course Descriptions

## Electrical Engineering with Concentration in Computer Engineering (EECE)

EECE 2120 Circuits II (3). Steady-state A.C. circuits; polyphase circuits; complex frequencies; resonance and frequency response; Bode plots; magnetically coupled circuits; two-port networks; Introduction to Fourier analysis. One hour of recitation is required. Prerequisites: ENGR 2000, MATH 3120..
EECE 3061 Advanced Programming Lab (1). Application of concepts of programming using I/O files, object oriented programming, algorithm analysis and data structures. Class projects involve software development and implementation. Prerequisite: ENGR 2230.

EECE 3100, 3101 Design of Digital Logic Systems and Lab (3-1). A course, which introduces techniques, used for designing and analyzing digital systems, logic, Boolean algebra, design of combinational and sequential circuits, design of digital circuits with MSI and PLD'S. VHDL Simulation, Micro-coding and assembly language programming. Lecture: 3 credits. Prerequisites: ENGR 2000. Co-requisites: ENGR 3200. Laboratory: 1 credit. Prerequisite: ENGR 2001. Co-requisites: EECE 3100.

EECE 3200 Linear Systems (3). Classical analysis of linear systems; Continuous and discrete time signals; Fourier series, Fourier Transform; Laplace Transform and its applications; transfer functions and impulse response; Z-transform; state space analysis of networks. Prerequisite: EECE 2120.

EECE 3210 Electromagnetic Theory I (3). Review of vector analysis and coordinate systems; electrostatic and magnetostatic laws; boundary conditions for dielectric and magnetic materials; Poisson's and Laplace's equations; time-varying fields and Maxwell's equations; plane wave propagation in free space, dielectrics and conductors; transmission lines. Prerequisite: EECE 2120.

EECE 3300, 3301 Electronics and Lab (3-1). AC and DC models of diodes, bipolar and FET transistors; theory, design, and analysis of single and multi-stage amplifiers at low, mid and high frequencies; design of op-amp circuits; transfer functions, analog computer and active filters. Prerequisites: EECE 2120, ENGR 3200, 3300. Laboratory: 1 credit. Prerequisites: ENGR 2001. Co-requisite: EECE 3300.

EECE 3330 Power Electronics (3). Introduction to the application of semiconductor devices in amplification, generation and control of electrical energy. Topics covered include operation, modeling, analysis of power semiconductor devices such as diodes, SCR's and triacs, analysis and design of controlled rectifiers and control of motors. Prerequisites: EECE 3300

EECE 3410 Energy Conversion (3). Magnetic circuits; single-phase and three-phase transformers; transformer design using voltage regulation, efficiency, and temperature rise; theory; analysis, and modeling of three-phase induction motors, synchronous machines and direct current machines, two-phase servo motors. Prerequisite: EECE 2120, ENGR 3200.
EECE 3420 Power Systems (3). Representation of transformers, synchronous machines, short, medium and long transmission lines, calculation of line parameters, per-unit representation, design projects on transmission lines and power factor correction; symmetrical faults, network reduction; load flow analysis. Prerequisites: EECE 3410, ENGR 3400. Co-requisite: EECE 3210.

EECE 3430 Electric Power Distribution (3). Power distribution system planning, load characteristics, application of distribution transformers, design of sub-transmission lines, distribution substations, primary and secondary distribution system design, voltage regulation and protection. Prerequisites: EECE 3410.

EECE 3500 Communication Systems (3). Spectral analysis and signal transmission channel design; amplitude, frequency, phase and pulse modulation systems; design of frequency-division and time-division multiplex systems; digital communication; noise and its effects in modulation systems. Prerequisites: EECE 3200, ENGR 3200.

EECE 4000 Control Systems I (3). Classical and modern control system analysis and design; transfer functions, time domain analysis and design; frequency domain analysis and design; stability analysis with Root Locus, Bode and Nyquist plots; state variable analysis of linear dynamic systems. Prerequisites: EECE 3200, ENGR 3200.
EECE 4001 Control Systems Laboratory (1). Experimental analysis of A.C. and D.C. servo systems, design of compensation and control systems, PLC and robotic applications. Co-requisites: EECE 4000.

EECE 4020 Introduction to Robotics (3). Basic principles of robotics and design of robot systems. Sensing position and velocity; concepts of robot coordinate systems, kinematics, dynamics, path control, velocity control, force control and compliance. Introduction to vision and robot programming languages. Prerequisite: EECE 4000.

EECE 4100 Digital Signal Processing (3). Discrete-time signal and systems; analysis and design of discrete-time systems in the frequency domain; sequence and recurrence relations; fundamentals of algorithms; realization of discrete-time systems; design of digital filters; Discrete-Fourier Transform (DFT) and Fast Fourier Transform (FFT) algorithms; Introduction to random signals and power spectral estimation. Prerequisites: EECE 3200, ENGR 3200.

EECE 4101 Electrical Systems Design Lab (1). Principles and practice of electrical systems design. Projects carried out on a "team" basis. System and subsystem design goals, specifications, constraints, implementations, presentations and milestones. Practical implementation of several systems in different areas of Electrical Engineering. Prerequisites: EECE 3300, 3301
EECE 4150 Introduction to Digital VLSI Design and Testing (3). Introduction to the design and layout of Very Large Scale Integrated (VLSI) circuits for complex digital systems; fundamentals of the VLSI fabrication process; and introduction to VLSI testing and structured design for testability techniques. Prerequisites: EECE 3100, 3101, 3300, 3301.(Check with department about frequency of offering).
EECE 4300 Digital Computer Structures (3). Computer hardware systems and the relevant aspects of software; various levels of design such as gate, register, and process levels, design of each major unit of the computer, memory and system organization. High performance computer systems are used as examples. Prerequisites: EECE 3100, ENGR 3200.

EECE 4310 Software Engineering (3). A course which follows the software life cycle from the requirement, specification, and design phases through the construction of actual software. Topics include management of programming teams, design and programming methodologies, debugging aids, documentation, evaluation and measurement of software, verification and testing techniques, the problems of maintenance, and portability and application of CASE tools. Prerequisite: EECE 3061.

EECE 4320 Computer Hardware Design (3). An introduction to hardware design of computers and "hardwired" and micro programmed standard peripherals. Modular design is emphasized. Topics include system buses and protocols, synchronous timing, and co-processing techniques. Prerequisites: EECE 3100, 3101, ENGR 3200. (Check with department about frequency of offering).

EECE 4350 Computer Communication and Networks (3). Introduction to local area networks, data communication over transmission lines; network technology, topology, graphs and trees and their applications, characteristics and the ISO layered network protocol; high speed networks, packet switching and routing, and the network interface; network performance and local area network design issues. Prerequisite: EECE 3200, ENGR 3200.
EECE 4360 Embedded Systems Design (3). This course presents the design of embedded systems which integrates microprocessors into digital systems. The course will teach students integration of hardware and software into a complete system. The course will also teach the use and integration of FPGAs using both compiler driven digital design and HDL design tools. Topics will include: hardware interfacing, communication and bus protocols, peripheral systems, embedded and real-time operating systems, real-time constraints, networking, and memory system performance, system integration and testing. Prerequisites: EECE 3100 and 3101
EECE 4361 Embedded Systems Design Lab (1). This course presents the integration of microprocessors into digital systems. Topics include hardware interfacing, bus protocols and peripheral systems, embedded and real-time operating systems, real-time constraints, networking, and memory system. Prerequisites: EECE 3100 and 3101
EECE 4410 Design of Renewable Energy Systems for Remote Community (3). Review of renewable energy sources, energy and society, and thermodynamics; discussion of sociopolitical, economic and environmental factors; theory of photo-voltaic, wind turbine power, batteries, and other renewable energy sources, load forecasting, transmission and distribution systems; design of hybrid energy systems, wind electric water pumping system, and design of electric power distribution system for a community. Prerequisite: ENGR 3200.

EECE 4600 Introduction to Biomedical Engineering (3). A multidisciplinary course of biomedical engineering which include: basics of anatomy and physiology, bio-electric phenomena, biomedical sensors, bio-signal processing, medical imaging, physiological modeling, biotechnology and rehabilitation engineering. Laboratory experiments for biomedical project design are also part of this course. Lecture 3 Credits. Prerequisites: Senior Standing.

EECE 4800 Introduction to Microprocessors (3). This course serves as an in-depth introduction to microprocessors. Topics covered are microprocessor hardware, software and architecture of both eight bit and sixteen bit machines; assembly and high-level languages; crossassemblers; cross-compilers on-line debugging tools. Prerequisites: EECE 3100, 3101, ENGR 3200.

# Department of Mechanical and Manufacturing Engineering 

Hamid R. Hamidzadeh, Ph.D., Department Chair<br>ET 136 A. P. Torrance Hall<br>(615) 963-5391

Faculty: M. Akbar, W. Joe, L. Onyebueke, A. Shirkhodaie.
General Statement: The Mechanical Engineering program systemically builds upon the knowledge acquired in the study of the physical sciences, mathematics, and engineering sciences to provide the student with a broad base in the various areas of mechanical and manufacturing engineering, and prepares them for careers in the private and public sectors and/or to pursue graduate study. Students may orient their program toward the mechanical design or manufacturing engineering or thermal-fluid systems design.

## Mission Statement

The Department is committed to provide the students with a dynamic academic and professional foundation enabling them to shape the future advancement of knowledge in the areas of mechanical and manufacturing engineering and to contribute to the economic growth and well-being of both the state and the nation.
The educational objectives for the department of Mechanical and Manufacturing Engineering are as follows:

1. The graduate, as a practicing engineer, has the proficiency in the implications of design decisions for mechanical, as well as thermal components and systems.
2. The graduate is prepared for positions of leadership in the industry with proven records of functioning independently, and in multicultural and interdisciplinary teams.
3. The graduate demonstrates a higher professional engineering aptitude by means of career advancement and/or positions with increasing responsibilities.
4. The graduate demonstrates professionalism and ethical conduct with an understanding of the engineer's responsibility to society and environment.
5. The graduate demonstrates an understanding of the need for life-long learning by making progress toward professional development: industrial training courses, achieving an advanced degree or engineering certification.
6. The graduate is an effective engineer with a strong ability to model, synthesize and analyze problems, think creatively, and communicate effectively.
7. The graduate can demonstrate adaptability to rapid engineering changes in the workplace with an awareness of global influences on engineering practices and business acumen.

The outcomes of the program require that the graduating students demonstrate the following abilities:
a. Ability to apply knowledge of mathematics, science, and engineering
b. Ability to design and conduct experiments, as well as, to analyze and interpret data
c. Ability to design a system, component, or process to meet desired needs within realistic constraints sucha
s economic, environmental, social, political, ethical, health and safety, manufacturing, and sustainability
d. Ability to function in multidisciplinary teams
e. Ability to identify, formulate, and solve engineering problems
f. Understanding of professional and ethical responsibilities
g. Ability to communicate effectively
h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
i. Recognition of the need for, and ability to engage in life-long learning
j. Knowledge of contemporary issues
k. Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

## Mechanical Engineering Design Experience:

A major curriculum objective is to provide mechanical engineering students with the ability to systematically apply engineering fundamentals to the design of mechanical, thermal, and manufacturing components and/or systems. Courses with engineering design content are integrated throughout the mechanical engineering curriculum.
The engineering design is integrated throughout the curriculum, starting with the definition of engineering and engineering design in ENGR 1020 Freshman Engineering Seminar in the freshman year. The design experience continues in the sophomore year with ENGR 2010 Thermodynamics, ENGR 2110 Statics, and ENGR 2120 Dynamics.
The sequence is followed in the Junior year with an interdisciplinary design course ENGR 3200 Introduction to Design.
Mechanical Design begins in the junior year with MEEN 3210 Mechanism Design, CVEN 3120 Mechanics of Materials, MEEN 3220 Design of Machine Elements, MEEN 3250 Computer Aided Design, and follows in the senior year with MEEN 4230 Machine Design. Students may take an elective course of MEEN 4800 Advanced Machine Design with 100\% design content and a technical elective course of MEEN 4100 Instrumentation and Automatic Controls or MEEN 4700 Mechanical Vibration.
The thermo-fluid design experience builds on ENGR 2010 Thermodynamics, CVEN 3100 Fluid Mechanics with two senior level thermal design courses MEEN 4150 Heat Transfer, MEEN 4250 Thermal-Fluid Systems Design, and an elective course with 100\% design content MEEN 4200 Heating and Air Conditioning.
The mechanical engineering design requirement is completed with two semester capstone design courses ENGR 4500, 4510- Capstone Design I \& II, which draw upon previous course work. An integral part of the design experience is the introduction of ethics, economics, social issues, design constraints, safety, and security which are required to make a design successful. These concepts are introduced in the junior year and are reinforced in the capstone design courses. Design and design integrated courses, starting in the junior year, requires formal written reports and formal oral presentations to communicate the final design requirements.
The Bachelor of Science degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC of ABET), http://www.abet.org.

Degree Requirements for Bachelor of Science in Mechanical Engineering: 128 Semester Hours

Technical Electives: Choose two from the following: MEEN $4100,4120,4300,4400,4600,4700$, EECE 4020 or any other approved by the advisor and Department chair.

Design Electives: Choose one from the following: MEEN 4200, 4800.

Suggested Four Year Plan:

## Bachelor of Science Degree in Mechanical Engineering

## FRESHMAN YEAR

FALL SEMESTER
ENGL 1010

| HR. | SPRING SEMESTER | HR. |
| :---: | :--- | :---: |
| 3 | ENGL 1020 | 3 |
| 4 | MATH 1920 | 4 |
| 3 | PHYS 2110 | 3 |
| 1 | PHYS 2111 | 1 |
| 1 | COMM 2200 | 3 |
| 1 | ENGR 2230 | 3 |
| $\frac{1}{14}$ |  |  |
| 14 |  |  |

SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| MATH 2120 | 4 | MATH 3120 | 3 |
| HIST 2010 | 3 | ENGR 2000 | 3 |
| ENGR 2110 | 3 | ENGR 2001 | 1 |
| ENGR 2010 | 3 | ENGR 2120 | 3 |
| PHYS 2120 | 3 | ENGL 2110 | 3 |
| PHYS 2121 | 1 | Humanities Elect. (1) | 3 |
|  | 17 |  | 16 |

All students are required to pass the ENGINEERING ENTRANCE EXAMINATION prior to enrolling in upper level (3000-4000) engineering courses.

## JUNIOR YEAR

FALL SEMESTER ENGR 3200
ENGR 3300
ENGR 3400
MEEN 3210
CVEN 3120
CVEN 3121
MEEN 3511

| HR. | SPRING SEMESTER | HR. |
| :---: | :--- | :---: |
| 3 | MEEN 3100 | 3 |
| 2 | MEEN 3250 | 3 |
| 3 | MEEN 3220 | 3 |
| 3 | CVEN 3100 | 3 |
| 3 | MEEN 3521 | 1 |
| 1 | Math/Science Elective (3) | 3 |
| 1 |  | 16 |

FALL SEMESTER HR. SPRING SEMESTER HR.
HIST 2020
MEEN 4011
MEEN 4021
1
MEEN 4250
ENGR 4510
MEEN 4230
Design Elective
Social Sci. Elect. (2)
Humanities Elect. (1) 3
ENGR 4500
ENGR 4900
Technical Elect. (4)
Social Sci. Elect. (2)

MEEN 3210 Mechanism Design (3). Study of kinematics and kinetics of mechanisms. Analyses of velocities, accelerations and forces in plane mechanisms by analytical and graphical methods. A study of cams and different gear trains. Design projects required. Prerequisite ENGR 2120.

MEEN 3220 Design of Machine Elements (3). A study of the fundamental principles which govern the design of machine elements. A study of design for strength, stiffness, wear and assembly. The design of screws, fasteners, welds, and springs will be considered along with bearing selection and lubrication. Design projects required. Prerequisites: MEEN 3210, CVEN 3120.

MEEN 3250 Computer Aided Design (3). Introduction to software design and its application to engineering design. Computer aided design of curves and surfaces. Computational techniques useful in design processes including simulation and optimization. Design projects required. Prerequisite: ENGR 3400.
MEEN 3511 Measurements and Instrumentation Laboratory (1). Use of basic instruments used in mechanical engineering. Measurement of basic physical properties including length, area, time, speed, mass, weight, inertia, temperature, humidity, pressure, viscosity, thermal conductivity etc. Calibration of instruments. Statistical and uncertainty analyses of data. Co-requisite: ENGR 3200
MEEN 3521 Manufacturing Processes Laboratory (1). Introduction to basic processing methods used to shape engineering materials. Use of lathes, milling, drilling, tapping, welding and casting. Basic testing of mechanical properties of materials. Prerequisite: MEEN 3511. Corequisite: MEEN 3100.

MEEN 4011 Mechatronics Laboratory (1). Introduction to advanced instrumentations used by engineers including displacement, acceleration, and force transducers, strain gauges, thermocouples, and data acquisition systems. Behavior of zeroth, first, and second order systems. Measurement of vibration and sound. Prerequisites: MEEN 3511.

MEEN 4021 Thermal Fluid Systems Laboratory (1). Observation and analysis of common mechanical engineering systems. hydraulic pumps and turbines. pneumatic fans and blowers, internal combustion engines, refrigerators and heat pumps, and solar energy system. Prerequisite: MEEN 4150.

MEEN 4100 Modeling, Simulation and Automatic Controls (3). Dynamic models and response of instruments and dynamic systems; transfer function and state space representation of mechanical, thermal, and electromechanical systems; time and frequency responses of systems; linear analysis of simple closed-loop systems; stability criteria; improvement of systems performance; and design of simple dynamic systems. Prerequisites: MATH 3120, ENGR 2000.
MEEN 4120 Mechanical Metallurgy (3). Introduction to various measures of strength. Topics include mechanical testing of polycrystalline materials, plastic deformation of metals, and elementary geometry of dislocations. Prerequisites: ENGR 3300, CVEN 3120.
MEEN 4150 Heat Transfer (3). Introduction of heat transfer mechanisms: conduction heat transfer including steady state; one, two, and three dimensional conduction and conduction in the unsteady state; convection heat transfer including forced and free convection; radiation heat transfer, and heat exchangers. Prerequisites: CVEN 3100, ENGR 3400.MEEN 4200 Heating and Air Conditioning (3). Principles of heating, ventilating and air conditioning systems, refrigeration cycles, refrigerant properties, heating and cooling loads, psychrometry; processes for heating, cooling, humidifying, dehumidifying, purifying; heat transfer principles and controls. Heat loss and gain computations. Design and layout of heating and airconditioning systems. Design projects required. Prerequisite: ENGR 2010.

MEEN 4230 Machine Design (3). The design of machine parts including shafting, gears, brakes, clutches, flywheels, and frames. Design projects required. Prerequisites: MEEN 3220, 3250.
MEEN 4250 Thermal Fluid Systems Design (3). Application of analytical techniques, the design of thermal devices, and thermalfluids engineering systems. Design projects required. Prerequisite: MEEN 4150.

MEEN 4300 Mechanical Energy Conversion (3). Energy sources: solar, chemical, hydraulic and nuclear. Discussion of solar cells, fossil fuels, hydraulic turbines, fuel cells, thermionic generators, thermoelectric generators, generators, fission reactors and the steam power plant. Prerequisites: ENGR 2010, CVEN 3100.

MEEN 4400 Manufacturing Engineering (3). Operating concepts and functions present in manufacturing. Topics include, industrial organization, process planning, specifications of designs of tools, jigs and fixtures, product quality control and automated production facilities. Case methods of instruction, which emphasize student participation in class discussion. Prerequisite: MEEN 3100.
MEEN 4600 Fluid Dynamics (3). Review of foundations of fluid dynamics and thermodynamics as related to control volumes; introduction to compressible flow; one-dimensional isentropic flow; normal shock waves; flow in constant area ducts with friction and flow in ducts with heating and cooling. Prerequisite: CVEN 3100.

MEEN 4700 Mechanical Vibration (3). Free and forced vibrations of systems with one and multi degrees of freedom. Modal analysis. Vibration measurements. Vibration of distributed systems. Passive and active vibration controls. Design considerations. Prerequisites: ENGR 2120 and MATH 3200.

MEEN 4800 Advanced Machine Design (3). Function and application of analytic techniques as integrated in design procedures and design methodology. Advanced design topics in selected areas such as gears, lubrication, and seals. A study of indeterminate structures and introduction to fracture mechanics. Design projects required. Prerequisite: MEEN 4230

# Department of Mathematical Sciences 

Sandra H. Scheick, Ph.D., Department Chair 305 Boswell Hall<br>(615) 963-5811

Faculty: D. Badamdorj, G. Bhatt, O. Bignall, G. Burks, K. Daniels, K. Ganesan, J. Jackson, P. Jara, J. Kelley, M. Mirani, M. Mutterspaugh, G. Nagarajan, L. Ouyang, W. Wayne, J.C. Pedjeu, R. Richardson, M. Reed, M. Sarkar, S. Sathananthan, S. Scheick, K. Semenya, M. Stanberry, G. Yang.

General Statement: The objectives of the Department are: (1) to provide programs of study for those who desire to pursue an undergraduate major in mathematics or physics, or a minor in physics, mathematics or astronomy; or who desire to pursue the interdisciplinary degree program with a concentration in one of these disciplines; (2) to provide courses designed to satisfy the mathematics and physics requirements for the several colleges and schools of the University; (3) to provide a limited number of courses in statistics; and (4) to provide services to the University and the wider community related to the academic mission of the Department. The Department offers curricula leading to B.S. degrees in Mathematics and Physics. The Department also offers an Interdisciplinary Degree with concentrations in either of these disciplines. In addition, students may earn secondary school licensure in Mathematics through the Department.

Accreditation: The teacher certification program in Mathematics is approved by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the entire teacher certification program of the University.

## Astronomy

General Statement: The objectives of the Astronomy Program are (1) to provide training that would enable students to gain a better understanding of the universe that they live in; (2) to provide training to enable graduates to enter graduate school in astronomy or related areas.

Departmental Requirements
(24 semester hours)
for a Minor in Astronomy
ASTR 1010-1020
ASTR 3010, 3330
ASTR 3800, 4900 (at least 9 hours)

## Mathematics

General Statement: The objectives of the Mathematics Program are (1) to provide training to enable graduates to be employed by any of a number of private industries, government agencies, foundations, and institutions requiring high-level quantitative skills and a highly developed ability to think critically and logically; (2) to provide training to enable graduates to enter graduate school in mathematics or related areas; (3) to provide training to enable graduates to assume careers as teachers of mathematics in secondary schools; (4) to develop proficiency in basic mathematical operations and develop skills in the use of formulas for the solution of problems; (5) to provide science and engineering majors the mathematical skills required by their various programs of study.

Departmental Requirements for Bachelor of Science
Mathematics: 41 Semester Hours
For Mathematics Education: 36 Semester Hours
The curriculum for a B.S. degree in Mathematics consists of a minimum of 120 semester hours, of which 42 must be at the 3000 or 4000 level. A minimum of 41 ( 36 for teacher certification candidates) semester hours must be in Mathematics or Statistics, exclusive of MATH 1005, 1115, 1710, 1720, and 1730 with at least 28 ( 24 for teacher certification candidates) of these being at the 3000 or 4000 level, exclusive of MATH 3710, 4724, and 4750. Note that

Computer Science 3900 may be used to satisfy upper level course requirements for the major in Mathematics. The 41 (36) hours in Mathematics are differentiated into a required core and an appropriate specialization. Further requirements include 6 hours ( 3 hours for teacher certification candidates) of Computer Science and 8 hours of Physics. Also it is strongly recommended that the student include related areas (RA's) of interest in the program of study. Because of the very tight prerequisite structure, no major program in Mathematics should be started without first consulting a major advisor. No Mathematics or Statistics course in which a grade below C is earned will be counted towards meeting the Mathematics major core requirements.

The Mathematics core consists of a calculus sequence, an introduction to real analysis, courses in linear and abstract algebra, a sequence in either advanced calculus or modern algebra, and a senior project. A methods course in the teaching of mathematics is required for those who are certifying to teach. In addition to successfully completing 41 (36) hours of course work (grade C or above), the major must pass a written comprehensive examination on the core requirements.

Students who minor in Mathematics must earn at least 24 semester hours: 12 semester hours of calculus and a minimum of 12 semester hours of 3000 or 4000 level MATH or STAT courses, exclusive of MATH 3710, 4724, and 4750. Computer Science 3900 may be used to satisfy upper level course requirements for the minor in Mathematics.

Besides the general program where the recommended RA's (related areas) are pre-medicine, pre-law, etc., there are four options of specialization.
a) The pure Mathematics option includes MATH 4310 and 4530, as well as the three sequences MATH 2500-3500, MATH 4410-4420 and 4640-4650 in the required core. The recommended RA's include computer science, physics, and philosophy.
b) The applied Mathematics option includes MATH 3120, 4560, and 4570, as well as MATH 4410-4420 in the required core. The recommended RA's include engineering, physics, computer science, and chemistry.
c) The statistics option allows the student to use STAT $4210-4220$ to satisfy the sequence requirement. The
recommended RA's include pre-actuarial science, general business, sociology, and psychology.
d) The secondary mathematics teacher option includes COMP 3200, STAT 3110, and MATH 3810, 4410, 4420, and 4750 in the required core. Students seeking teacher certification must apply in writing to the College of Education, usually in the sophomore year. At the time of applying they must have a 2.75 cumulative grade point average and must have passed the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST and the CBT. Formal admission to the Teacher Education Program is a prerequisite for enrolling in upper-division certification courses.

Students must pass PRAXIS II exam before they can enroll in student teaching. Students must complete nine semester hours of enhanced student teaching with an eight-week placement at the secondary level and a seven-week placement at the middle school level. Successful completion of the program results in licensure to teach grades 7-12. For a complete list of requirements for admission to and retention in the Teacher Education Program, see the College of Education section.

## General Education Core

Communications ( 9 hours)

| ENGL 1010, 1020 | Freshman English I, II <br> (minimum grade of C in each) |
| :--- | :--- |
| COMM 2200 | Public Speaking |


| Humanities and/or Fine Arts (9 hours) |  |  |
| :---: | :---: | :---: |
| ENGL 2110-2322 | Sophomore Literature | 3 |
| Elective | From approved list. | 3 |
| Elective | From approved list. | 3 |
| Social and Behavioral Science (6 hours) |  |  |
| ECON 2010 | Principles of Economics I | 3 |
| Elective | From approved list. | 3 |
| History (6 hours) |  |  |
| HIST 2010 | American History I | 3 |
| HIST 2020 | American History II | 3 |

$\frac{\text { Natural Science (8 hours) }}{\text { PHYS 2110/2111 General Physics I } 4}$
PHYS 2120/2111 General Physics II 4
$\frac{\text { Mathematics (3 hours) }}{\text { MATH } 1910 \quad \text { Calculus I, Alternative }} 4$

Orientation (1 hour)
ASOR 1001 Orientation for Science Majors
1

Total General Education Hours: 43
Upper-division Admission:
For admission into the upper-division program of the Mathematics major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, and earned a cumulative grade point average of at least 2.0 on college-level course work. They must also have earned a grade of C or better in MATH 1910, 1920 and 2110.

MATH 3500
MATH 3510
MATH 3610
MATH 3620

MATH 3640
MATH 4410, 4420, or
Advanced Calculus I,
II, or MATH 4640,
4650, or Modern
Algebra I, II or STAT
4210, 4220 Statistical
Methods I, II
MATH 4500
ELECTIVES

Experience I
Mathematics Research 1
Experience II
Intermediate Analysis 3
Linear Algebra I 3
Linear Algebra II (Not required 3
for teacher certification candidates)
Abstract Algebra 3
(MATH 4410, 4420 required of 6
teacher certification
candidates)

Suggested courses in areas of specialization may be obtained by consulting the major advisor.

*MATH 1710 and/or 1720 must be taken prior to MATH 1910 if need is indicated.

SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| HIST 2010 | 3 | HIST 2020 | 3 |
| MATH 2110 | 3 | MATH 3510 | 3 |
| ECON 2010 | 3 | ENGL 2010 | 3 |
| PHYS 2110, 2111 | 4 | PHYS 2120, 2121 | 4 |
| COMP 3000 | 3 | Social Science Elective | 3 |
| MATH 2500 | 1 |  |  |
|  | 17 |  | 16 |


| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MATH 3610 | 3 | MATH 3620 | 3 |
| COMP 3200 | 3 | Electives (Any Level) | 9 |
| MATH 3500 | 1 | MATH 3640 | 3 |
| Electives(Any Level) | 9 |  |  |
|  | 16 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| MATH 4410 or 4640 or STAT 4210 | 3 | MATH 4420 or 4650 or STAT 4220 | 3 |
| MATH 4500 | 3 | MATH Elective 3000/4000 Level | 3 |
| MATH Elective 3000/4000 Level | 3 | Electives 3000/4000 Level | 7 |
| Electives | 4 |  |  |
|  | 13 |  | 13 |
| Suggested Four-Year Plan: (122) |  |  |  |
| Bachelor of Science Degree in Mathematics |  |  |  |
| With Teacher Certification |  |  |  |
| Licensure for Grades 7-12 |  |  |  |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| MATH 1910* | 4 | MATH 1920 | 4 |
| Humanities Elective | 3 | Humanities Elective | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2200 | 3 | EDCI 2010 | 3 |
| ASOR 1001 | 1 | MATH 3130 | 3 |
|  | 14 |  | 16 |

*MATH 1710 and/or 1720 are to be taken prior to MATH 1910 if need is indicated.

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| MATH 2110 | 4 | MATH 3510 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| ECON 2010 | 3 | Social Science Elective | 3 |
| PHYS 2110, 2111 | 4 | PHYS 2120, 2121 | 4 |
| PSYC 2420 | 3 |  |  |
| MATH 2500 | 1 | MATH 3610 | 3 |
|  | 18 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| MATH 4410 | 3 | MATH 4420 | 3 |
| EDCI 4190 | 2 | MATH 3640 | 3 |
| PSYC 3120 | 3 | MATH 3810 | 3 |
| STAT 3110 | 3 | MATH 4750 | 3 |
| EDAD 4910 | 3 | MATH 3710 | 3 |
| MATH 3500 | 1 |  |  |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMP 3200 | 3 | MATH 4724 | 9 |
| MATH 4500 | 3 | EDCI 4705 | 3 |
| EDCI 3110 | 3 |  |  |
| EDCI 3870 | 3 |  |  |
| EDSE 3330 | 3 |  |  |
| Elective (Any Level) | 1 |  |  |
|  | 16 |  | 12 |

## Course Descriptions <br> Astronomy (ASTR)

Astronomy courses do satisfy the University's science requirement.

ASTR 1010 Astronomy | (4). The first course in a 2 semester sequence in astronomy. History of astronomy, development of theory, astronomical equipment and observational techniques. Course concentrates on the solar system, the sun, the planets, interplanetary matter, comets and meteors. Prerequisite: Math 1110 or Math 1720 or Math 1830 or the equivalent. 3 lectures and one laboratory (2 hours) per week. The sequence ASTR 1010-1020 may be used to satisfy the University's science requirement. Offered in the fall and spring.

ASTR 1020 Astronomy II (4). The second course in an introductory 2 semester sequence in astronomy. Course concentrates on stars and galaxies, quasars, pulsars, black holes and cosmology. Prerequisite: ASTR 1010. Three lectures and one laboratory (2 hours) per week. Offered in the fall and spring.

ASTR 3010 Observational Astronomy (4) (Formerly ASTR 301). Focus on methods of observation, optics of telescopes, direct interpretation of data, mathematical methods of data reduction, and the physics of astronomical detectors. Prerequisites: Physics 2110, or 2010 or ASTR 1010-1020. Three lectures and one laboratory (2 hours) per week. Offered in the spring.
ASTR 3330 Astrophysics (3) (Formerly ASTR 333). A course focusing on the physics of astronomical phenomena and objects as opposed to observing practices. Prerequisites: PHYS 2120, 2121 and ASTR 1020 or 3010. Offered in the fall.

ASTR 3800 Astronomy Seminar (3-6) (Formerly ASTR 380). Students will read, discuss, an present current articles in the astronomical literature. Prerequisite: PHYS 2120, 2121 and ASTR 1020, or concurrent enrollment in a 300 level astronomy course. Repeatable to six hours. Offered in fall, spring and summer.

ASTR 4900 Research in Astronomy (3-6) (Formerly ASTR 490). A research practicum course with students doing research in astronomy at the Center of Excellence in Information Systems for credit. Prerequisite: PHYS 2110, 2111 and the least one 300 level astronomy course. Repeatable to six hours. Offered in fall, spring and summer.

## Mathematics (MATH)

MATH 1013 Contemporary Mathematics (3). An Introduction to the mathematics used in our society. It includes elements of mathematical thought, inductive and deductive reasoning, and problem solving. Some of the topics included are graphics, counting techniques, number sequences, probability and statistics. This course satisfies the general education mathematics requirement. Prerequisites: Two years high school algebra or the equivalent, or one year of high school algebra and one year geometry or the equivalent. Offered in the fall, spring, and summer.
MATH 1110 College Algebra I (3). Graphs, relations, functions, inequalities, polynomials, exponents, radicals, logarithms, and exponential functions. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one year of geometry, or the equivalent. Offered in fall, spring, and summer.
MATH 1111 Honors College Algebra I (3). The Honors version of MATH 1110. Enrollment is limited to members of the University Honors Program. Offered in fall.

MATH 1115 Fundamentals of Problem-Solving (1) (Formerly MATH 191). An introduction to Polya theories with emphasis on solving problems using mathematical methods. Prerequisite: 3 semester hours of college-level mathematics or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 1410, 1420 Structure of the Number System I, II (3, 3). Set theory; relations; functions; inverses; order properties; systems of numeration; rational and irrational numbers; elementary number theory; mathematical systems; algorithms for the fundamental operations on whole numbers, integers, fractions, decimals, percent, ratio and proportion; equations; problem-solving; measurement in the metric system; elements of algebra; plane and solid geometry; elementary statistics. Prerequisite: For MATH 1410: Two years of high school algebra or the equivalent or one year high school algebra and one year geometry or the equivalent. For MATH 1420: MATH 1410. MATH 1410 Offered in fall, spring, and summer. MATH 1420 Offered in fall and spring.

MATH 1710 Precalculus Mathematics I (3). A course which with MATH 1720 provides the student with the foundation necessary to enter the calculus sequence. The topics include the study of polynomial, rational, exponential and logarithmic functions, and matrices. Prerequisites: two years of high school algebra or the equivalent, or one year of high school algebra and one year of geometry, or the equivalent. Offered in fall, spring, and summer.

MATH 1720 Precalculus Mathematics II (3). A continuation of MATH 1710. Topics include right triangle trigonometry, trigonometric
functions, analytic geometry, conic sections, sequences, and notation. Prerequisite: grade of C or better in MATH 1710 or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 1730 Precalculus Mathematics, Alternate (3). Integrated college algebra and trigonometry. This course provides the student with the background necessary to enter the calculus sequence. Topics include polynomials; rational functions; exponential, logarithmic, and trigonometric functions; analytic geometry; and conic sections. Prerequisites: high school algebra II, geometry, and trigonometry, or the equivalent. Offered in fall and spring.

MATH 1830 Basic Calculus I (3). An introduction to the basic concepts of differential and integral calculus, with applications oriented towards economics, business, and the social sciences. Prerequisite: grade of C or better in MATH 1110 or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 1910 Calculus I, Alternate (4) (Formerly MATH 1910). Part of the sequence MATH 1910, 1920 recommended for Mathematics, Physics, Chemistry, and Biology majors. Topics include functions, graphs, limits, derivatives with applications, and the definite integral with applications. Prerequisite: grade of C or better in MATH 1720 or 1730 or permission of the Department Chair. Offered in fall, spring, and summer

MATH 1920 Calculus II, Alternate (4). Study of derivatives and integrals of the trigonometric, logarithmic, and exponential functions, techniques of integration, sequences, and series. Course is part of the series MATH 1910, 1920, 2110, recommended for all Mathematics, Physics, Chemistry, and Biology majors. Prerequisite: grade of C or better in MATH 1910 or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 2110 Calculus III, Alternate (3). Vector functions, threedimensional space, partial derivatives, multiple integrals, line integrals, and applications. Part of the sequence MATH 1910, 1920, and 2110 recommended for all Mathematics, Physics, Biology, and Chemistry majors. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 2500 Mathematics Research Experience I (1). The first in a two semester sequence of seminars designed to familiarize the mathematics major with the tools necessary to do research in mathematics. Included are logic, reading and writing mathematics, research methods and typesetting. MRE I is an introduction to the topics with emphasis on the reading and research methods. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Required of all Mathematics majors (except for teacher certification candidates) Offered in fall and spring.

MATH 3120 Applied Mathematics (3). Ordinary differential equations, Fourier series, and Laplace transforms, with emphasis on the application to mechanical and electrical systems. Prerequisites: grades of C or better in MATH 1920. MATH 3120 is required of all Physics majors. Offered in fall and spring.
MATH 3130 Advanced Mathematica (3) (Formerly MATH 313). An indepth treatment of the computer software "Mathematica" with emphasis on programming in the "Mathematica" language to solve selected problems. Prerequisites: grades of C or better in MATH 2110 and 3610, and COMP 2120, or permission of the Department Chair. Offered in fall, spring, and summer.

MATH 3210 Introduction to Number Theory (3) (Formerly MATH 321). Divisibility properties for the integers, the greatest common divisor, unique factorization, congruences, Diophantine equations, the Euler function, Wilson's theorem, the Chinese remainder theorem, and other elementary properties of number. Prerequisite: grade of $C$ or better in MATH 1920 or permission of the Department Chair. Offered in fall.

MATH 3500 Mathematics Research Experience II (1). The second of in a two semester sequence of seminars designed to familiarize the mathematics major with the tools necessary to do research in mathematics. Included are logic, reading and writing mathematics, research methods and typesetting. MRE II is a continuation of the topics with emphasis on writing and presentation. Prerequisite: grade C or better in MATH 2500 or permission of the Department Chair. Required of all Mathematics majors (except for teacher certification candidates) Offered in fall and spring.
MATH 3510 Intermediate Analysis (3) (Formerly MATH 351). A study of the foundations of real variable calculus, including the real numbers, limits, sequences, continuity, Bolzano-Weierstrass theorem, Heine-Borel theorem, intermediate-value theorem, and differentiability. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Required of all Mathematics and Physics majors. Offered in spring.

MATH 3610 Linear Algebra I (3) (Formerly MATH 361). Homogeneous and non-homogeneous systems, matrix algebra, determinants, vector spaces and subspaces, bases, orthogonal bases, linear transformations, and rank. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Required of all Mathematics, Physics, and Computer Science majors. Offered in fall, spring, and summer.

MATH 3620 Linear Algebra II (3) (Formerly MATH 362). A continuation of MATH 3610. It is strongly recommended that 3610 and 3620 be taken sequentially. Topics include a further treatment of linear transformations, rank, eigenvalues, eigenvectors, and the spectral theorem. Prerequisite: grade of C or better in MATH 3610. Required of all Mathematics majors. Offered in fall, spring, and summer.

MATH 3640 Abstract Algebra (3) (Formerly MATH 364). An introduction to properties of groups, rings, integral domains, and fields. Prerequisites: grades of C or better in MATH 1920 and 3210, or permission of Department Chair. Required of all Mathematics majors. Offered in spring.

MATH 3710 Teaching Mathematics in the Secondary School (3) (Formerly MATH 371). Lectures, discussions, and reports on materials and methods used in the instruction of mathematics at the middle school and high school level. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Mathematics. Prerequisite: official admission to the Teacher Education Program. Offered in spring.
MATH 3810 Geometry (3) (Formerly MATH 381). A brief review of Euclidean geometry with further topics, including the non-Euclidean and projective geometries. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Required of all teacher certification candidates in Mathematics. Offered in spring and summer.

MATH 3900 Introduction to Numerical Analysis (3) (Formerly MATH 390). Errors, interpolation, approximations, numerical quadrature, solution of ordinary differential equations. Prerequisite: grade of C or better in MATH 1920 or permission of the Department Chair. Offered on demand.

MATH 4310, 4320 Topology I, II (3, 3) (Formerly MATH 431, 432). Homeomorphisms, connectedness, compactness, metric spaces, normal spaces, Urysohn's lemma, Tietze's theorem, separation axioms, product topology, Hilbert space, quotient space, paracompactness, nets, and filters, with an introduction to homotopy theory. Prerequisites: grades of C or better in MATH 2110, and 3510, or permission of the Department Chair. Offered on demand.

MATH 4410, 4420 Advanced Calculus I, II (3, 3) (Formerly MATH 441, 442). A variety of topics including functions of several variables; the algebra and topology of Euclidean n-space; differentials; extrema; the gradient; line, surface and volume integral; Stokes' theorem; inverse mapping theorem; and manifolds. Prerequisites: grades of C or better in MATH 2110, 3510, and 3610, or permission of the Department Chair. Mathematics majors must take this sequence or MATH 46404650 or STAT 4210-4220. MATH 4410 is offered in fall and 4420 in spring.

MATH 4500 Senior Project (3) (Formerly MATH 450). A comprehensive inquiry into the nature of mathematics. Emphasis is on written presentation of the subject matter. Required of all prospective graduating seniors in Mathematics. Prerequisite: senior standing. Offered in fall.

MATH 4510, 4520 Real Analysis I, II (3, 3) (Formerly MATH 451, 452). Set theory, algebra, and topology of the real numbers, continuous functions, uniform convergence, measure and integration theory, Lebesque measure and integrals, convergence theorem, L-spaces, Banach spaces, differentiation, Radon-Nikodym theorem, Fubini theorem. Prerequisite: grade of $C$ or better in MATH 4420 or permission of the Department Chair. Offered on demand.

MATH 4530, 4540 Complex Analysis I, II $(3,3)$ (Formerly MATH 453, 454). Analytic functions, Cauchy's integral theorem, Taylor and Laurent series, singularities, residue theory, analytic continuation, conformal mapping, Riemann surfaces, infinite products, and entire functions. Prerequisite: grade of C or better in MATH 442 or permission of the Department Chair. MATH 4530 is offered in fall of odd-numbered years and 4540 is offered in spring of even-numbered years.
MATH 4560, 4570 Differential Equations I, II $(3,3)$ (Formerly MATH 456, 457). First- and second-order equations, general theory of linear nth-order differential equations, constant coefficient systems, variation of parameters, infinite series, singular solutions, asymptotic solutions,

Green's functions, stability, special functions, Laplace transform. Prerequisites: grades of C or better in MATH 3030 and 3620, or permission of the Department Chair. MATH 4560 is offered in fall of even-numbered years and spring of odd-numbered years.

MATH 4640, 4650 Modern Algebra I, II $(3,3)$ (Formerly MATH 464, 465). Equivalence relations, mappings, groups, rings, fields, polynomial rings, modules, vector spaces, Galois theory. Prerequisites: grades of C or better in MATH 3210, 3620, and 3640, or permission of the Department Chair. Mathematics majors must take this sequence or MATH 4410-4420 or STAT 4210-4220. MATH 4640 is offered in the fall and 4650 in the spring.

MATH 4724 Student Teaching of Mathematics in the Secondary Schools (9) (Formerly MATH 472S). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in teaching mathematics. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently. Offered on demand.

MATH 4730, 4740 Logic I, II (3, 3) (Formerly MATH 473, 474). Introduction to mathematical logic. Logic $I$ is a survey of fundamental material including the statement calculus and the predicate calculus. Logic II is an introduction to Fuzzy Logic and Gödel's Incompleteness Theorem. Prerequisite: grade of C or better in MATH 2110 or permission of the Department Chair. Offered on demand.

MATH 4750 History of Mathematics (3) (Formerly MATH 475). The origin and development of mathematical ideas, beginning with geometry and algebra and continuing through selected topics in modern mathematics. Prerequisite: grade of C or better in MATH 2110 or permission of the Department Chair. Offered in spring and summer.

MATH 4900 Special Topics (3) (Formerly MATH 490). Special topics in mathematics to be offered with permission of the undergraduate mathematics curriculum committee in response to the preference and needs of the students. Repeatable to six hours. Prerequisite: permission of the Department Chair. Offered in fall, spring, and summer.

## Physics (PHYS)

PHYS 1030 Conceptual Physics (4). This course is designed to present aspects of conceptual physics of interest to students in music, communications, and other artistic and non-scientific disciplines. Students will gain the ability to understand and explain physics concepts of dance and movement, musical instruments and the human voice, light and color, and electronic devices related to music and sound. There is a one 2-hour lab each week employing the use of scientific instrumentation to demonstrate and measure the physical principles of the course. This course does not count toward the minor in physics. Prerequisite: Two years of high school algebra or the equivalent, or a year high school algebra and one year geometry or the equivalent. Offered each semester.

PHYS 2010 College Physics I (3). The first course in a non-calculusbased introductory physics sequence. Topics included are mechanics and sound. The course presents the basic principles of physics. It is required of biology, pre-medicine, and allied health profession majors. Prerequisite: grade of C or better in MATH 1720, or 1730. Offered in fall, spring, and summer.

PHYS 2011 College Physics I Laboratory (1). One two-hour laboratory each week. This course is designed to be taken concurrently with the corresponding lecture course, PHYS 2010. Offered in fall, spring, and summer.

PHYS 2020 College Physics II (3). The second course in a non-calculus-based physic sequence. Topics included are heat, light, electricity, magnetism, and modern physics. Prerequisite: grade of C or better in PHYS 2010. Offered in fall, spring, and summer.

PHYS 2021 College Physics II Laboratory (1). One two-hour laboratory each week. This course is designed to be taken concurrently with the corresponding lecture course, PHY 2020. Offered in fall, spring, and summer.
PHYS 2110 General Physics I (3) (Formerly PHYS 2030). Principles of mechanics, gravitation, fluid mechanics and sound. The first course in calculus-based physics sequence that is intended for student with majors in physics, engineering, mathematics, or a physical science. PHYS 2110, with accompanying laboratory, is required of all Physics and Mathematics majors. Prerequisite: MATH 1720 and 1910; Corequisite: MATH 1920. Offered in fall, spring, and summer.

PHYS 2111 General Physics I Laboratory (1) (Formerly PHYS 2031). One two-hour laboratory per week designed to be taken concurrently with the corresponding lecture course, PHY 2110. Required of all Physics and Mathematics majors. Offered in fall, spring, and summer.

PHYS 2120 General Physics II (3) (Formerly PHYS 2040). Principles of heat, electricity, magnetism, and optics. The second course in calculus-based physics sequence. PHYS 2120 with accompanying laboratory, is required of all Physics and Mathematics majors. Prerequisite: PHYS 2110 with C or better. Offered in fall, spring, and summer.

PHYS 2121 General Physics II Laboratory (1) (Formerly PHYS 2041). One two-hour laboratory per week designed to be taken concurrently with corresponding lecture course, PHYS 2120. Required of all Physics and Mathematics majors. Offered in fall, spring, and summer.

PHYS 3110, 3120 Electricity and Magnetism I, II (3, 3) (Formerly PHYS 311, 312). Fundamentals of theoretical electricity and magnetism. Emphasis is placed upon problems using vector calculus in three dimensions. Prerequisites: MATH 2110 or 2125, AND PHYS 2120, 2121, all with a grade of C or better. Three lectures per week. Required of all Physics majors. PHYS 3110 is offered in fall of oddnumbered years and 3120 in spring of even-numbered years.

PHYS 3140 Optics (3) (Formerly PHYS 314). A brief review of geometrical optics and a study of physical optics, including spectroscopy. Prerequisites: MATH 1920 and either of the sequences: PHYS 2020, 2021 or PHYS 2120, 2121. Three lectures and one laboratory period per week. Offered on demand.
PHYS 3200 Heat and Thermodynamics (3) (Formerly PHYS 320). A study of the fundamentals of heat and an introduction to thermodynamics with applications to chemistry. Prerequisites: PHYS 2120, 2121, and MATH 1920. (MATH 3610 and either MATH 2110 or 2125 recommended). Three lectures per week. Required of all Physics majors. Offered in spring of even-numbered years.
PHYS 3210, 3220 Mechanics I, II (3, 3) (Formerly PHYS 321, 322). Statics and dynamics of particles and rigid bodies, Lagrange's and Hamilton's equations, fluid statics, and vibrations. Prerequisites: PHYS 2120, 2121, and MATH 1920. MATH 3610 and either MATH 2110 or 2125 recommended. Three lectures per week. PHYS 3210 required of all Physics majors. PHYS 3210 is offered in fall and 3220 is offered on demand.
PHYS 3411, 3421 Advanced Physics Laboratory I, II (2, 2) (Formerly PHYS 341, 342). A course designed to permit the student to develop a variety of laboratory skills and techniques by performing advanced experiments in mechanics, heat, sound, light, and modern physics. Prerequisites: PHYS 2120, 2121, and MATH 1920. Two laboratory periods per week. Required of all Physics majors. PHY 3411 is offered in fall and 3421in spring.
PHYS 3610 Solid State Physics (3) (Formerly PHYS 361). A physical interpretation of the conductive properties of metal and semiconductor materials based on the periodic nature of the crystalline solid, with applications including the transistor. Primarily for engineering, physics, or computer science students with junior standing. Prerequisites: PHY 2120, 20121 and either MATH 2110 or 2125. Required of all Physics majors. Offered in spring of oddnumbered years.

PHYS 4100, 4110 Introduction to Quantum Mechanics I, II (3, 3) (Formerly PHYS 410, 411). Introduction to fundamental principles of quantum mechanics and methods of calculation, with application to atomic, molecular, and nuclear physics. PHYS 4100 is required of all Physics majors. Prerequisites: PHY 2120, 2121, and MATH 1920. PHYS 4100 is offered in spring of odd-numbered years and 4110 is offered on demand.

PHYS 4120, 4130 Modern Physics I, II $(3,3)$ (Formerly PHYS 412, 413). The classical and modern concepts of the atom and introduction to molecular structure, the chemical bond, nuclear physics, fission, isotopic tracers, medical radiology, cosmic rays. PHYS 4120 is required of all Physics majors. Prerequisites: MATH 1070 and either of the following two sequences: PHYS 2020, 2021, or PHYS 2120, 2121. PHYS 4120 is offered in fall of even-numbered years and 4130 is offered on demand.

PHYS 4500 Senior Project (3) (Formerly PHYS 450). Individual study and presentation of a special topic in physics. Required of all Physics majors. Prerequisite: senior standing. Offered in fall.
PHYS 4600 Undergraduate Readings and Research (3) (Formerly PHYS 460). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level physics and permission of instructor. Offered in fall, spring, and summer.

PHYS 4900 Special Topics in Physics (Up to 9 hours total) (Formerly PHYS 490). Courses offered to the preference and needs of the student. The credits for each course vary from two to three semester hours, with a total of nine credit hours the maximum from this group permitted toward the Physics degree. Prerequisites: PHYS 2120, 2121, and permission of the instructor. PHYS 4900 and 4911 offered in fall, spring and summer, Other 49XX course offered on demand.

PHYS 4905
PHYS 4906 Analytical Mechanics
PHYS 4907 Electricity and Magnetism
PHYS 4908 Modern Physics
PHYS 4909 Optics
PHYS 4910 Quantum Mechanics
PHYS 4911 Research Project
PHYS 4912 Solid State Physics
PHYS 4913 Thermodynamics and Statistical Mechanics

## College of Health Sciences

Stephanie Bailey, MD., MS., Interim Dean 161 Clement Hall (615) 963-5924

General Statement: The College of Health Sciences was established in 1974 as the School of Allied Health Professions. The mission of Tennessee State University's College of Health Science is to promote academic quality and student success by "preparing tomorrow's health leaders" through professional programs, interdisciplinary collaboration, clinical research, scholarly inquiry, evidence-based practice, and community service. Program offerings in the College include Respiratory Care, Dental Hygiene, Health Care Administration and Planning, Health Sciences, Health Information Management, Human Performance and Sport Sciences, Nursing, Occupational Therapy, Physical Therapy, Public Health, and Speech Language Pathology and Audiology.

The Goals of the College of Health Sciences are:

1. To develop and implement educational programs designed to produce tomorrow's health practitioners, educators and leaders based upon employment demands.
2. To recruit students interested in careers in the health field into programs offered in the College and to instill in students the basic principles of professionalism; to provide students with career counseling, academic advisement, and tutorial assistance all designed to assist them in achieving their career goals.
3. To identify, early, barriers for student success in order to achieve maximal levels of preparation required to produce a health career.
4. To maintain full accreditation by appropriate agencies for programs offered in the College.
5. To recruit and maintain faculty capable of making significant contributions to the basic and applied research efforts of the institution, College, and world.
6. To encourage and promote the delivery of services to the community by sponsoring seminars, workshops, consultation, service learning projects and the delivery of health services when appropriate.

Values of the College of Health Sciences
We display interest in each other and in you; we maintain ethical practices and conduct all matters with integrity, courtesy and dependency; we embrace learning, working and service; and will carry out our responsibilities to you by being prepared to give our best.

Admission/Retention Requirements: The College of Health Sciences offers programs in seven undergraduate health related fields and six graduate fields. (See Graduate Catalogue for information on master's degree programs in

Human Performance and Sport Sciences, Nursing, Occupational Therapy, Public Health and Speech and Hearing Science, and the doctorate in Physical Therapy.) Five of the seven undergraduate programs require completion of a preprofessional curriculum as a prerequisite for admission to the professional/clinical level of the program. Admission to a professional program is a competitive process separate from the University's admissions process. Completion of the prerequisites for any health sciences program does not ensure acceptance into that program.

Admission and retention policies for each program are found under departmental headings.

## Dental Hygiene

Mr. Gary-Lee A. Lewis, BS.,R.D.H., M.Ed., Department Chair 213 Clement Hall 615-963-5801

Faculty: G .A. Lewis, J. Williams, R. Word, C. Rainey (supervisory dentist), G. Battiste, Clinical Supervisors: E. Thompson, M. Salamon, B. Kibbel, T. Robertson, L. Roberts, F. Licht

General Statement: Two academic degree programs are offered by the Department of Dental Hygiene: the Associate of Applied Science and the Bachelor of Science Completion Degree. Students accepted into the Bachelor of Science degree completion program must be graduates of an accredited associate degree Dental Hygiene program and hold a Tennessee Dental Hygiene License. The Bachelor of Science Degree/ Completion Program may serve as the foundation for further study.
"The Dental Hygienist is a licensed oral health care professional who integrates the roles of a clinician, educator, consumer advocate, manager, change agent and researcher to prevent oral disease and to promote health." (Dental Hygiene Theory and Practice, Saunders, St. Louis, MO 2010)

Graduates of the Dental Hygiene Program are eligible to take the National Board Dental Hygiene Examination and Regional/State Board Examinations throughout the country.

## Mission Statement

The Department of Dental Hygiene is committed to an educational program of excellence for its students. The Department further pledges to provide ongoing oral health care to all populations, especially those designated as underserved through community service and cultural diversity. We pledge to continue the promotion of Dental Hygiene as a profession and promote lifelong learning.
Goals

1. To develop well-prepared dental hygiene professionals who deliver quality care regardless of cultural diversity.
2. To provide an environment which facilitates students to think; become critical thinkers; learn to problem solve and engage in lifelong learning.
3. To promote the effective use of technology throughout the curriculum among faculty and students.
4. To promote a positive value system that will foster ethical behavior throughout a student's life and career as a dental hygienist.
5. To promote and provide oral health care to everyone including populations designated as underserved.
6. To promote Dental Hygiene as a profession through service learning and civic engagement.

## Admission/Retention Requirements

A student must be accepted into the University before applying
to the Dental Hygiene Associate Degree Program. Applications to the Department of Dental Hygiene must be received by January $15^{\text {th }}$ of the year in which admission is requested. Any applications received after the January $15^{\text {th }}$ deadline will not be considered by the Dental Hygiene Admissions Committee. Admission into Dental Hygiene is required prior to enrolling in any dental hygiene courses.

NOTE: Acceptance to the University does not ensure acceptance into the Dental Hygiene Program. After notification of acceptance to the University by the Office of Admissions and Records, the prospective applicant's admissions materials should be submitted directly to the Dental Hygiene Department. All newly submitted admissions material will then be evaluated by the Admissions Committee in the Dental Hygiene Department. Dental Hygiene applicants will be informed of their acceptance or non-acceptance by the Department Chairperson of the Admissions' Committee in Dental Hygiene.

## Associate of Applied Science (AAS) Degree Program

In addition to the University admission requirements, applicants to the two-year AAS degree program must meet the following program requirements in order to be considered for admission:

1. A minimum high school grade point average (GPA) of a 2.5 and a college GPA of a 2.7 on a 4.0 scale.
2. One year of high school algebra.
3. One year of high school biology.
4. One year of high school chemistry. (A high school transcript that indicates the above courses are required; and if a student is deficient in any of these courses, one semester of each course at the college level will be accepted).
5. A composite score of 19 on the ACT, or an equivalent score on the SAT.

College Prerequisites and Other Requirements

1. *One semester of college English Composition.
2. *One year of Anatomy and Physiology.
*One semester of Microbiology.
3. *One semester of Humanities.
4. **One letter of recommendation from science teachers describing the applicant's potential for success in the Dental Hygiene curriculum.
5. One character recommendation.
6. An autobiographical sketch in the applicant's handwriting; 100 words or more
7. A complete dental evaluation on the official forms provided by the Department of Dental Hygiene once an applicant is admitted to the program; and a copy of the TSU health questionnaire should be submitted to the Department.
8. A personal interview (interviews may be arranged for applicants who live beyond 300 miles from the University).
9. A criminal background check will be required once an applicant is admitted into the program.

Any transfer credits will be evaluated by the Office of Admissions once official college transcripts are submitted.
*Course prerequisites required for the AAS Degree in Dental Hygiene, must be completed before acceptance into the program. Anatomy and Physiology I \& II and Microbiology must be taken within the last 5 -Years upon applying to the program. All prerequisites courses must be completed and passed with a grade of "C" or better before acceptance into the program.
**If an applicant has had a long period of absence from an academic program, references from employers, counselors, or other community leaders who know the applicant may substitute for references from science teachers.

The following advanced Health Sciences courses should not be taken unless you are officially enrolled in the BS Completion Degree Program: HLSC 4500, and HCAP 4900

## Bachelor of Science (BS)/ Degree Completion Program:

Applicants who apply to the baccalaureate degree completion program must be graduates of an accredited associate degree program in Dental Hygiene. They must submit the following data and meet the following criteria:

1. A 2.0 grade point average in clinical dental hygiene courses and a minimum overall grade point average of 2.5 on a 4.0 scale. Applicants with grade point averages higher than the minimum may be given priority in acceptance.
2. Two letters of recommendation from dental hygiene faculty who taught the applicant. One letter must attest to the clinical competencies of the applicant. (May not be required of recent TSU graduates.)
3. Official college transcript(s). (May not be required of recent TSU graduates.)
The following advanced dental hygiene courses (3000-4000 level) require National Board Certification and/or Tennessee State Licensure: DHYG 3010, DHYG 4020, and DHYG 4120.

## Admission to Advanced Standing

Students admitted from other dental hygiene programs must earn, in residence, a minimum of 24 of the last 30 hours offered for the AAS degree in Dental Hygiene. To receive consideration for advanced standing, the following requirements are necessary:

1. Matriculation in an accredited dental hygiene program.
2. Official transcripts from each school.
3. Satisfactory scholastic and disciplinary records from the dental hygiene program from which the applicant is withdrawing. No students are accepted if failures have resulted in dismissal or academic probation in another dental hygiene program.
4. A statement of honorable dismissal from the dean or director of the program from which the applicant is withdrawing.
5. If the interval since attendance has exceeded two years, the applicant may be required to take examinations recommended by the Curriculum Committee or to retake courses.
6. Admission to advance standing may necessitate auditing or taking credit courses which the Curriculum Committee may deem it necessary to ensure adequate preparation for continued matriculation in the dental hygiene program.

## Retention/Progression Policy

Grades less than a "C" earned in dental hygiene courses are considered non-passing. Students are required to maintain a minimum grade point average of 2.0 for each academic year. Students who earn a non-passing grade in a dental hygiene course(s) are unable to progress.
Dismissal from the program will result from documented poor studentship.

Recommendations for advancement are the charge of the Dental Hygiene Evaluation Committee which meets following mid-term examinations and final examination periods.

Students who have been dismissed from the Dental Hygiene program are eligible for reconsideration only under extenuating circumstances.

Students who earn a non-passing grade in any supporting science course or any Dental Hygiene course will not be permitted to take the next sequential course(s).

Students will be dismissed from the professional program for any of the following reason(s):

1. Failure to maintain a cumulative grade point average of 2.0 or above
2. A grade less than "C" in 2 or more major field courses.
3. A grade less than " $C$ " in more than one clinical experiences.
4. A grade less than " $C$ " in a course that has been repeated.
5. Withdrawal from any Dental Hygiene course or failure to register for any semester without prior written approval from the Department

Students who have been dismissed from the program due to poor academic performance may reapply for admission during the next application cycle and compete for space in a subsequent class. Students requesting readmission should write to the Admissions Committee by documenting evidence of a substantial change in circumstances that could lead to improved academic performance.

## Readmission Policy

A student who earns a failing grade in a dental hygiene course and would like to re-apply must do so, in writing, to the Program Director for readmission at least six weeks before the beginning of the semester readmission is requested. An updated transcript is required. Readmissions are based on previous performance in dental hygiene courses, faculty recommendations, successful completion of college core courses, and available faculty and clinical resources. There is no guarantee that any student will be readmitted.

Once a student is readmitted and earns a second failing grade in any dental hygiene course at TSU, the student cannot continue in the program.
Students who withdraw from the program may be reviewed one time by the faculty, on an individual basis, if they are eligible for re-admission to the program.

Departmental Requirements for the Associate of Applied Science Degree in Dental Hygiene

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | DHYG 1020/1024 | $2 / 2$ |
| CHEM 1100/1101 | $3 / 1$ | DHYG 1040 | 2 |
| DHYG 1010/1014 | $3 / 2$ | DHYG 1100 | 2 |
| DHYG 1030 | 2 | DHYG 1140 | 2 |
| DHYG 1110 | 2 | NUFS 2110 | 3 |
| SPCH 2200 | 3 | PSYC 2010 | 3 |
| BIOL 2210/2221** | $4 / 0$ | BIOL 2220/2221** | $4 / 0$ |
| ENGL 1010** | 3 |  |  |
|  | 24 |  | 20 |


| SUMMER SESSION I/II |  |  |  |
| :--- | :---: | :--- | :---: |
| SUMMER SESSION | HR. | $\begin{array}{l}\text { SUMMER SESSION } \\ \text { DHYG 1050 }\end{array}$ | 2 | \(\left.\begin{array}{l}DHYG 2300 <br>

(Elective)\end{array}\right)\)

DHYG 1030 Radiology (2). Lecture, group, and individually supervised practice covering x-ray production, radiation hygiene, exposing, developing, mounting, reading and interpretation of intra-oral radiographs. (Formerly DH 103) Taken concurrently with DHYG 1024. Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DHYG 1040 Dental Materials (2). Study of characteristics and techniques of the manipulation of materials used in dentistry. Emphasis is placed on basic knowledge for selecting materials. Laboratory experiences supplement lectures. (Formerly DH 104) Taken as designated in the first year curriculum. Prerequisite: Satisfactory completion of first semester curriculum.

DHYG 1050 Periodontics (2). An introduction to periodontics with emphasis on the recognition of gingival and periodontal problems, their probable cause, treatment and prevention, techniques of patient education, and continued application of theoretical principles of clinical dental hygiene. (Formerly DH 105) Prerequisite: Satisfactory completion of the prescribed first two semesters of studies.

DHYG 1100 Histology and Embryology (2). Study of microscopic oral tissues to provide students with the knowledge and understanding of the cellular structure and its application to dental problems. (Formerly DH 110) Taken concurrently with prescribed courses of the first semester, first year curriculum.

DHYG 1110 Tooth Morphology (2). A study of the nomenclature, form and structure of the permanent and deciduous dentition and their supporting and related structures. (Formerly DH 111) Taken concurrently with other prescribed courses of the first semester, first year curriculum.

DHYG 1134 Clinical Dental Hygiene II (1). This course is designed to be a continuation of freshman clinical experiences and provides a bridge to the sophomore year. (Formerly DH 113C). Prerequisite: Satisfactory completion of prescribed first two semesters of study.

DHYG 1140 Department Chair and Neck Anatomy (2). The structure and functional aspects of the Department Chair and neck and their significance to the practice of dental hygiene. Taken as designated in the first year curriculum. (Formerly DH 114) Prerequisite: Satisfactory completion of prescribed first semester curriculum.

DHYG 2010 Dental Hygiene Lecture (2). This course Includes several modules; ethics, jurisprudence, and special patients. (Formerly DH 201) Prerequisite: Satisfactory completion of the prescribed first year of study.

DHYG 2014 Clinical Dental Hygiene III (3). Supervised competencybased application of the practice of clinical dental hygiene. (Formerly DH 201C) Prerequisite: Satisfactory completion of the prescribed first two semesters of studies. DHYG 2010 and 2100 must be taken concurrently. (SL)

DHYG 2020 Dental Hygiene Lecture (2). This course discusses methods of pain control which includes administration and monitoring of nitrous oxide analgesic and administration of regional anesthesia. (Formerly DH 202) Prerequisites: Satisfactory completion of first semester sophomore courses. DHYG 2024 must be taken concurrently.

DHYG 2024 Clinical Dental Hygiene IV (3). A progressive continuation of competency based supervised applications of clinical dental hygiene and expanded periodontics (Formerly DH 202C and 205C) Prerequisite: DHYG 1050, 2050, and satisfactory completion of first semester sophomore courses. DHYG 2020 must be taken concurrently.

DHYG 2050 Expanded Periodontics for the Dental Hygienist (2). Designed to offer aspects of periodontics which are not generally considered as traditional dental hygiene functions. Advanced instructions are offered to further enable students to recognize and label periodontal disease and to understand etiological factors. Students are taught to participate in the planning of treatment for early or minor forms of periodontal disease and to apply and remove dressings. (Formerly DH 205) Prerequisites: DHYG 1050 and satisfactory completion of the prescribed first year of study.

DHYG 2100 General and Oral Pathology (3). A study of disease and disease processes, the oral manifestations of systemic disease, oral pathology with particular attention to oral cancer and cancer detection methods. (Formerly DH 210) Prerequisite: Satisfactory completion of prescribed first year of study.
DHYG 2110 Community Dentistry (2). A survey of private, community, and governmental agencies. Dental epidemiology, socio-economic factors relating to dental care, special programs, and third party payment plans are covered. (Formerly DH 211) Prerequisite: Completion of the prescribed first year curriculum.(SL)

DHYG 2150 Dental Health Education (2). A study of the dental health educational methods and procedures for individuals and groups. Students will design and produce relevant projects. (Formerly DH 215) Prerequisite: Satisfactory completion of first semester sophomore courses.

DHYG 2300 Dental Hygiene Topics Abroad (3). This course is designed to expose pre-dental hygiene and dental hygiene students to an international perspective of health and dental care with an emphasis on dental hygiene care delivery. It will introduce students to the role dental hygiene plays in health care broad and how it applies in specific sociocultural, economic and educational situations. It will also provide students with a global opportunity to understand the practice of dental hygiene and expose them to cross-cultural experiences.

DHYG 3010 Curriculum Concepts in Dental Hygiene and Allied Health Education (3). A course designed to explore theories of learning, teaching strategies, and evaluation techniques as applied to dental hygiene and allied health education. (Formerly DH 301) Prerequisite: EDCI 3870.

DHYG 4020 Dental Hygiene Externship (3). One hour of seminar and four hours externship. An application of dental hygiene techniques to various setting, e.g., hospitals, health centers and DHYG 4020 Clinics. Experiences will be individualized and designed to meet student proposed career goals. (Formerly DH 402).

DHYG 4120 Teaching Practicum (3). One hour seminar and 6 hours of practicum. A teaching practicum designed to provide practical experience in the clinical and classroom settings for baccalaureate students. (Formerly DH 412) Prerequisite: DHYG 3010.

# Department of Respiratory Care \& Health Information 

Elizabeth Kunnu, Ed.S., M.Ed., RHIA, Department Chair 314 Industrial Arts Building (615) 963-7441

Faculty: V. Brock, C. Hamilton, E. Kunnu, R. Speitel, Medical Director: D. Sherman

General Statement: There are two separate bachelor's degree programs within the Department of Respiratory Care and Health Information (RC \& HI): Respiratory Care and Health Information Management. Both programs are fully accredited by separate accreditation agencies, and each program has its own admission requirements. The mission of the RC \& HI Department is to provide its students with quality education for successful careers in the healthcare industry through engagement in clinical practice/research, pursuit of graduate study in a related field, lifelong learning, and service to the community.

## Respiratory Care Program

## Faculty: C. Hamilton, R. Speitel

The overall goal of the baccalaureate degree program in Respiratory Care is to provide an educational curriculum designed to prepare students for the National Board for Respiratory Care examinations, the practice of respiratory therapy, and to be educators, staff therapists and/or supervisors in the field of respiratory care. Students receive clinical training in affiliated hospitals.

The field of Respiratory Care requires respiratory care practitioners to administer various treatment modalities and medications, perform diagnostic procedures, and/or manage sophisticated life-support equipment. Although the majority of respiratory care practitioners are employed by hospitals, there are also opportunities to practice outside of the standard hospital setting. The student who satisfactorily completes all courses in the curriculum is awarded the Bachelor of Science degree.

## Admissions Requirements

Students who wish to pursue a degree in Respiratory Care (RC) must apply to the RC Admissions Committee for acceptance. Students must be formally admitted to the Respiratory Care Program in order to take professional courses which begin in the junior year. Applications for admission are accepted from students who meet the following application requirements:

1 Admission to Tennessee State University.
2. A minimum high school grade point average of 2.5 on a 4.0 scale. Students should have taken either the ACT or the SAT exam. These scores should be provided to the department if they have not been provided to the University.
3. One year of high school algebra, biology, and chemistry.
4. Completion of the first two years of the CRCS curriculum with a grade point average of 2.5 on a 4.0 scale.
5. A "C" or better grade in supporting science and math courses.
6. Two letters of recommendation from instructors who have taught the applicant.
7. An interview with the RC Admissions and Retention Committee or its designee (An interview does not automatically guarantee admission into the program. The Admissions process is very competitive).
8. Students must demonstrate that they have some aptitude in the field and the ability to perform essential respiratory care functions.

Applicants will be screened by the RC Admissions and Retention Committee and will be advised of the final decision regarding acceptance into the program by a representative of the Committee.

## Criminal Background Check and Drug Screening:

A specified drug screen and/or a designated criminal background check including both the state and federal level is a requirement for student placement within clinical agencies. Based on the results of these checks, an affiliated clinical agency or site may determine to not allow a student's presence at their facility. This could result in a student's inability to successfully complete the requirements of the respiratory care program. Additionally, a criminal background may preclude licensure or employment.

## Degree IN-3 Students

Students may be accepted to the Degree $\mathrm{IN}-3$ option if they meet the Admission criteria, in addition to the following criteria:

1. 3.3 High School GPA
2. Sophomores - 3.0 GPA and earned 30 credits in general education courses
3. Earn 15 to 18 credits a semester for six semesters
4. Earn 9 credits in mini terms, generally at no cost
5. Earn 9 credits in regular summer sessions

## Transfer Students

1. Applications are accepted from transfer students from other colleges or universities, other departments at Tennessee State University.
2. Applicants must have an overall college grade-point average of 2.5 on a 4.0 scale and meet the program admission requirements for entering applicants. Any exceptions must be approved by the Respiratory Care Admissions and Retention Committee.
3. Transfer credits for non-major courses will be accepted according to University policies on admission with advanced standing. All transfer credits from accredited Respiratory Care programs will be accepted when
evidence is provided that the content of the courses previously taken is essentially the same as the content for courses in the curriculum. No credit will be given for required courses in which the student has received a grade lower than a "C."
4. A Tennessee State University student who transfers to Respiratory Care is required to complete a Change of Major form. The Admission and Retention Committee will make the final decision about admission to the program. All candidates will be advised of the Committee's final decision about their acceptance to the program.

## Students with a Science Degree or Associate Degree in Respiratory Care

Students with a degree in Science may be admitted to the program if they meet the admission criteria. In addition, students who have taken the required science and general education courses may be able to accelerate their studies, but should consult the program director for details.

## Special Requirements

Students are required to complete a physical examination and obtain medical and malpractice insurance prior to enrolling in their clinical rotations. During clinical rotations, students may be assigned to off-campus facilities. Students are responsible for transportation costs, clinic attire, and other expenses related to clinical experiences. In order to complete the degree, students must pass three exit exams with a $75 \%$ or above in the following courses: CRCS 3110, CRCS 3120, and CRCS 3224. Students are also expected to become a member in the American Association for Respiratory Care (AARC).

## Retention Policy

1. Students who earn a non-passing grade in any supporting science course or any CRCS course will not be permitted to take the next sequential course(s). A course in which a student has failed may be repeated when it is offered again with the department chair's permission provided space is available in the class. A grade of " $C$ " is equivalent to $75 \%$ for all professional courses.
2. Students will be dismissed from the professional program for any of the following reasons:
a. Failure to maintain a cumulative grade point average of 2.0.
b. A grade of less than " $C$ " in 6 or more semester hours within the major.
c. A grade of "F" in more than 2 semester credit hours within the major.
d. A grade of less than " $C$ " in more than one clinical experience.
e. A grade of less than " $C$ " in a course that has been repeated.
f. Withdrawal from any Respiratory Care course or failure to register for any semester without prior written approval from the department chair.
g. Failure to comply with clinical and/or academic policies established by the Department.
3. Students who have been dismissed from the program due to poor academic performance must reapply for admission during the next application cycle and compete for space in a subsequent class. Students who request readmission should present to the Admissions Committee evidence of a substantial change in circumstances that could lead to improved academic performance.

National Board Exam: Students who complete all the required courses for the BS degree are eligible to take the National Board Examinations.

General Education Core Courses (41 credit hours): ENGL 1010, 1020; ENGL Literature; HIST 2010, 2020; Humanities 6 semester hours; MATH 1110; PSYC 2010; SOCI 2010; BIOL 2210, 2211, 2220, 2221; COMM 2200

Additional Required Courses (9 credit hours): UNIV 1000; CHEM 1110, 1111; BIOL 2400, 2401.

Major Core Courses ( 70 credit hours): CRCS 1000, 2014, 2030, 2044, 2110, 2120, 2320, 3010, 3011, 3015, 3016, 3020, 3021, 3024, 3030, 3040, 3050, 3110, 3120, 3151, 3161, 3224, 4224, 4264, 4320, 4410, 4500.

| Suggested Plan ${ }^{\text {* }}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Bachelor of Science Degree in Respiratory Care |  |  |  |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | MATH 1110 | 3 |
| BIOL 2210/2211 | 4/0 | BIOL 2220/2221 | 4/0 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | Humanities/ |  |
| CRCS 1000 | 2 | Fine Arts | 3 |
|  | 14 |  | 13 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 2200 | 3 | ENGL Literature | 3 |
| BIOL 2400/2401 | 4/0 | SOCI 2010 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| Humanities/ Fine Arts | S 3 | PSYC 2010 | 3 |
|  | 13 |  | 12 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| CRCS 2014 | 2 | CRCS 2044 | 4 |
| CRCS 2030 | 3 | CRCS 2120 | 3 |
| CRCS 2031 | 1 | CRCS 2320 | 3 |
| CRCS 2110 | 3 | CRCS 3015 | 3 |
| CRCS 3010 | 3 | CRCS 3020 | 3 |
| CRCS 3011 | 1 | CRCS 3151 | 1 |
|  |  | CRCS 3121 | 1 |
|  | 13 |  | 18 |
| SUMMER SESSSIONS I/II |  |  |  |
| SUMMER SESSION | HR. | SUMMER SESSION | HR. |
| CRCS 3040 | 3 | CRCS 3016 | 2 |
| CRCS 3050 | 2 | CRCS 3161 | 1 |
|  | 5 |  | 3 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| CRCS 3110 | 2 | CRCS 3224 | 4 |
| CRCS 3024 | 4 | CRCS 4224 | 3 |
| CRCS 3030 | 3 | CRCS 4410 | 3 |
| CRCS 4264 | 3 | CRCS 4500 | 3 |
| CRCS 4320 | 3 |  |  |
| CRCS 3120 | 1 |  |  |
|  | 16 |  | 13 |

Total Credit Hours Required: 120
Suggested Plan II:
Bachelor of Science Degree
in Respiratory Care
*All associate level transfer students who satisfactorily complete 2 years of college are required to enroll in RC courses outlined in the junior and senior years as outlined in Plan I.
*Transfer credits may be given for all equivalent courses taken at the associate degree level. Transfer students should contact the RC department for policy details. Transfer students must take all the remaining general education and science courses not taken at the associate level to fulfill the course requirements as outlined in Plan I.

Suggested Plan III:
Plan III (Degree IN-3) is an accelerated curriculum designed for students who are interested in earning their degree in three years instead of the traditional four years.

Bachelor of Science Degree
in Respiratory Care
FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | BIOL 220/2221 | $4 / 0$ |
| MATH 1110 | 3 | BIOL 2400/2401 | 4 |
| CHEM 1110/1111 | 4 | COMM 2200 | 3 |
| BIOL 2210/2211 | 4 | CRCS 1000 | 2 |
|  | 16 |  | 16 |

SUMMER SESSION
XTREME HR
HUM/Fine Art 3
MAYMESTER
HIST 20103
SUNSATIONAL
PSYC 2010


SOPHOMORE

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| CRCS 2014 | 2 | CRCS 2044 | 4 |
| CRCS 2030/2031 | 4 | CRCS 2120 | 3 |
| CRCS 2110 | 3 | CRCS 2320 | 3 |
| CRCS 3010/3011 | 4 | CRCS 3015/3151 | 4 |
| SOCI 2010 | 3 | CRCS 3020/3021 | 4 |
|  | 16 |  | 18 |
| SUMMER SESSSION |  |  |  |
| XTREME HR. <br> HUM/Fine Art 3 <br> MAYMESTER  <br> HIST 2020 3 <br> SUNSATIONAL  <br> CRCS 3016/3161 3 <br>   <br>  9 |  |  |  |
|  |  |  |  |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| CRCS 3040 | 3 | CRCS 3224 | 4 |
| CRCS 3024 | 4 | CRCS 4224 | 3 |
| CRCS 3030 | 3 | CRCS 4410 | 3 |
| CRCS 4264 | 3 | CRCS 4500 | 3 |
| CRCS 4320 | 3 | CRCS 3110 | 2 |
|  |  | CRCS 3120 | 1 |
|  | 16 |  | 16 |


| $l$ | SUMMER SESSION |
| :--- | :---: |
| XTREME | HR |
| CRCS 3050 | 2 |
| MAYMESTER |  |
| ENGL LIT | 3 |
|  |  |

Total Credit Hours Required: 120
Accreditation

The Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care.

## Course Descriptions <br> Respiratory Care (CRCS)

CRCS 1000 Introduction to Cardio-Respiratory Care Sciences (2) An introductory course which includes respiratory terminology, basic concepts of respiratory diseases, including etiology, pathophysiology, clinical diagnosis, and respiratory care. The course is designed to provide conceptual understanding of major respiratory disease process and basics of respiratory management. (Formerly CCS 100) Prerequisite: Consent of Instructor.

CRCS 2014 Cardio-Respiratory Care Sciences Clinical I / Laboratory (2) This course serves to introduce the beginning respiratory care sciences student to the clinical/laboratory environment. The student spends eight hours/week participating in oxygen therapy and clinical oriented workshops or observing the application of respiratory care in the clinical/laboratory setting. Corequisite: CRCS 3010, 3011.
CRCS 2030 Pulmonary Function Testing and Evaluation (3) A course designed to expose the student to the pulmonary function testing, evaluation, and assessment. It includes spirometry, diffusion studies, flow volume loops, helium dilution, nitrogen washouts, and the instructional sequence necessary to become certified in ABG analysis. Prerequisites: BIOL 2210, 2211, 2220, 2221; CHEM 1110, 1111; MATH 1110.

CRCS 2031 Pulmonary Function Testing and Evaluation Laboratory (1) A course designed to expose the student to pulmonary function testing, evaluation, and assessment. This lab course includes spirometry, flow volume loops and ABG analysis. Corequisite: CRCS 2030.

CRCS 2044 Cardio-Respiratory Care Sciences Clinical II (4) This course provides the Cardio-Respiratory Care Sciences student with opportunities to practice basic respiratory care procedures. The student will get experience in the clinical setting with emphasis placed on performance of respiratory care procedures and application of equipment. This course will emphasize topics such as aerosol therapy, IS, and IPPB therapy. The student will assume limited patient care responsibilities. Prerequisite: CRCS 3010, 3011.
CRCS 2110 Pulmonary Function in Disease (3) A review of the application of respiratory therapeutic modalities in the treatment and management of medical, and pre-post surgical patients. Course includes etiology, recognition and management of pulmonary diseases, and an introduction into basic x-ray interpretation. Corequisite: CCS 2030, 2031.
CRCS 2120 Respiratory Pharmacology (3) A course designed to present the various classifications of pharmacological agents used in the treatment and management of cardio-respiratory diseases. Course includes safe handling, dispensing, and administration of pharmacological agents. Emphasis is placed upon the effects, indications, and contraindications of respiratory pharmacological agents. Prerequisites: CHEM 1110, 1110; BIOL 2210, 2211, 2220, 2221; BIOL 2400, 2401.
CRCS 2320 Cardiopulmonary/Renal Physiology (3) A course which goes beyond general physiology to cover the respiratory system as it relates to ventilatory mechanics, gas transport, gas exchange, acidbase physiology, neurological and chemical control of respiration, fluid and electrolyte balance, ventilation/perfusion relationships, etc. Prerequisites: BIOL 2210, 2211, 2220 2221; CHEM 1110, 1111.
CRCS 3010 and CRCS 3011 Cardio-Respiratory Care Sciences Technology I (3/1) A course designed to introduce the student to the fundamental principles of respiratory care. This course will include the professional development of respiratory care sciences; the principles, operations and maintenance of compressed gas source and gas administration devices; the use of aerosol and humidity therapy; and basic respiratory mechanics. Prerequisites: BIOL 2210, 2211, 2220, 2221; CHEM 1010, 1011; MATH 1110.

CRCS 3015 and CRCS 3151 Mechanical Ventilation I and Lab (3/1) A comprehensive course covering the principles, operation and application of devices used to provide ventilatory assistance and support. Course includes an in-depth study of patient-ventilator interface, artificial airways, establishing the need for and discontinuance of mechanical ventilation. This course includes a laboratory segment. Core requisite: CRCS 2320.

CRCS 3016 CRCS 3161 Mechanical Ventilation II and Lab(2/1) This course presents material on the application of mechanical ventilation with regard to patient diagnosis and changes in condition. Course includes discussions of case studies and patient management involving various modes of mechanical ventilation, presentation of recent advances in mechanical ventilation, and an emphasis on troubleshooting equipment and patient problems. Prerequisite: CRCS 3015 and 3151.

CRCS 3020 and CRCS 3021 Cardio-Respiratory Care Technology II and Laboratory (3/1) A study which includes the principles of the operation and usage of various respiratory cae modalities such as aerosol therapy, IPPB, IS, PD\&C, manual resuscitators, sterilization techniques and classification of mechanical ventilators. The student will also be instructed in CPR and patient assessment. Prerequisite: CRCS 3010, 3011.

CRCS 3024 Cardio-Respiratory Care Sciences Clinical III (4) A 24 hour/week supervised clinical application of patient care skills developed in CRCS 2030, 2044, 2120, and 2320 for 10 weeks. This course provides the student with opportunities to refine procedures and evaluation skills including applied respiratory pharmacology, bedside spirometry, PFT, ABG analysis, and pre-post operative evaluation. IPPB and mechanical ventilation also will be practiced. Prerequisites: CRCS 3010, 3011, 3020, 3021.
CRCS 3030 Critical Care (3) An intensive study of critically-ill patient care which includes special procedures, patient monitoring techniques and evaluation, acute and chronic respiratory failure, neuromuscular diseases, and trauma management. Prerequisite: CRCS 3015, 3151.

CRCS 3040 Neonatal/Pediatric Respiratory Care (3) A study of the principles, practices, and techniques utilized in the respiratory care management of the newborn and pediatric patient. Topics will include common pathological conditions associated with such patients. Prerequisites: CRCS 2110, 3015.
CRCS 3050 Case-Based Seminar (2) This course presents a discussion of cases and topics relevant to respiratory care. (Formerly CCS 305) Prerequisites: CRCS 2110, 3015.
CRCS 3110 and 3120 Professional Exams Seminars (2/1) These courses shall prepare students for the professional credentialing exams CRT and RRT respectively. Prerequisite: All CRCS junior courses.
CRCS 3224 Cardio-Respiratory Care Clinical IV (4) A 24 hour/week supervised clinical practicum for 10 weeks designed to provide performance competencies in the administration of respiratory care to critically ill patients and pediatric respiratory care. Prerequisite: CRCS 3024.

CRCS 4224 Advanced Critical Care Management (3) An advanced clinical course where the student is exposed to continuous and extensive critical care patient management during the last six weeks of the semester. Corequisite: CRCS 3224.
CRCS 4264 Advanced Pulmonary Function Testing and Pulmonary Rehabilitation (3) An advanced clinical course where the student can develop emphasis on methodology of diagnosis of respiratory diseases, including advanced pulmonary physiology and pathology during the last six weeks of the semester. The student is exposed to pulmonary exercise testing and rehabilitation procedures. Prerequisite: CRCS 2030, 2031. Corequisite: CRCS 4320.
CRCS 4320 Pulmonary Rehabilitation and Home Care (3) Objectives, methods, and expected results of pulmonary rehabilitation will be presented and discussed. Patient testing methods, including clinical exercise testing, patient and family education, bronchial hygiene, breathing retraining, physical reconditioning, and home care will be described and discussed. Prerequisites: CRCS 2030, 2031, 2110.

CRCS 4410 Cardio-Respiratory Care Sciences Management Concepts (3) This course includes clinical management of patients and clinical simulations. Also, the human dimensions of personnel, financial, and material management, and planning as related to respiratory care services presented and discussed. Prerequisites: CRCS 3015, 3016.

CRCS 4500 Senior Project (3) An approved directed independent study project. The students will collect clinical data, analyze and write a detailed paper with references from pertinent journals. Prerequisites: All CRCS junior and senior year fall semester courses.

# Health Information Management Program 

Faculty: V. Brock, E. Kunnu
Health Information Management (HIM) is a profession that focuses on operations management - essential to ensuring an accurate and complete medical record and cost effective information processing. Health Information Management professionals have skills and competencies in health data management, information policy, information systems, administrative and clinical work flow. HIM skills are vital to continuous quality improvement, regulatory requirements, revenue cycle processes, and ensuring the availability of accurate health data.

Job opportunities: Health Information Management professionals, as part of a quality patient care team including the Information Technology (IT) staff and clinical informatics professionals that oversee electronic health records, are employed as an HIM department director, an HIM system manager, a data quality manager, information security/privacy officer, educator, consultant, health data analyst, quality improvement analyst, a physician office manager, and a claims and reimbursement coordinator in a variety of health care settings. These settings include hospitals, outpatient clinics, managed-care organizations, consulting firms, accounting firms, medical group practices, hospice and home healthcare agencies, long-term care facilities, correctional facilities, pharmaceutical companies, rehabilitation facilities, behavioral healthcare organizations, healthcare research facilities, insurance companies, law firms, or state and federal healthcare agencies.

The Department of Health Information Management offers a four-year program of study which leads to the Bachelor of Science degree. The department's goals are to prepare students as competent, confident, innovative and contributing health information professionals who can identify and use a variety of information management resources and technologies to accomplish the objectives of various health care facilities and related organizations. Students are also prepared to take the National Certification Examination for credentialing by the American Health Information Management Association.

The Health Information Management curriculum utilizes a career-ladder approach and is divided into a technical phase and a professional phase. This approach is designed to accommodate high school graduates, transfer students, and graduates from accredited community colleges who have completed prerequisite science courses, and Registered Health Information Technicians (RHITs) who wish to progress to the professional level of a Health Information Administrator. The curriculum includes general education courses, management principles, computer technology/information systems, professional education requirements and integrated supervised professional practice.

The Bachelor of Science degree is awarded after satisfactory completion of 120 credit hours. Graduates of the program are required to demonstrate entry-level competencies for Registered Health Information Administrators (RHIAs) and are eligible to take the National Certification Examination which is administered by the American Health Information Management Association (AHIMA). Graduates are strongly encouraged to take the National Certification Examination in the same year they graduate so they can be recognized as a leader in Health Information Management by employers and other healthcare professionals.

## Admission Requirements

There are three options available to students who are interested in the Health Information Management Program. Option I is designed for freshmen and transfers. Option II is designed for students who have completed an associate
degree in Health Information Technology. Option III (Degree $\mathrm{IN}-3$ ) is an accelerated curriculum designed for students who are interested in earning their degree in three years instead of the traditional four years. In addition to the University's admission criteria, the program's admission and retention requirements include:

## Entering Freshmen

1. High school graduation with a minimum overall combined grade point average (GPA) of a 2.5 on a 4.0 scale or G.E.D. scores of 50 or above in the five subjects tested.
2. A minimum composite test score of 19 on the ACT (this requirement may change if the University's entrance requirements change).

## Degrees IN-3 Students

Students may be admitted if they meet the following criteria:

1. 3.3 High School GPA
2. Sophomores - 3.0 GPA and earned 30 credits in general education courses
3. Earn 15 to 18 credits a semester for six semesters
4. Earn 9 credits in mini terms, generally at no cost
5. Earn 9 credits in regular summer sessions

## Transfer Students

1. Applications are accepted from students who transfer from other colleges, universities or other departments at Tennessee State University.
2. Transfers, students who change their major and continuing students must successfully complete all remedial or developmental courses before they are given unconditional admission into the program.
3. Applicants must have a minimum overall combined grade point average of a 2.5 on a 4.0 scale.
4. Students who transfer from other departments at Tennessee State University are required to complete a Change of Major Form.

## Advanced Standing

1. Students with a degree in a health related field or other fields may be admitted to the program if they meet the admission criteria.
2. Individuals with an associate degree in medical records/ health information technology and are interested in pursuing a baccalaureate degree in Health Information Management must complete a minimum of 60 semester hours including a directed professional practicum. These individuals are required to complete general education requirements for a BS degree, as well as management, science or other prerequisite courses required for the program in addition to all the 3000-4000 level courses as indicated in the curriculum.

## Additional Requirements

1. Applications to the program are due June 30 for the fall semester and December $1^{\text {st }}$ for the spring semester.
2. Two letters of recommendation from individuals (nonfamily member) who know the applicant.
3. A personal interview by the Admission and Retention Committee or its designee.
4. All applicants will be informed of the final decision of the Committee about their acceptance into the program.
5. Students are responsible for their transportation expenses and other costs relating to their professional practice experience and field trips.
6. Students are responsible for their own physical examinations, malpractice insurance, criminal background checks and drug tests prior to being placed in professional practice rotations.
7. Students are responsible for coordinating their acceptance into a professional practice rotation in healthcare facilities in-state and out-of-state.
8. Students are required to complete the following courses with a grade of "C" or better: ENGL 1010 \& 1020; three hours of college math; three hours of oral communication, HIST 2010 and 2020 or 3410; eight hours of natural sciences; six hours of Social \& Behavioral Science, and nine hours in Humanities and/or Fine Arts, including three hours of English Literature prior to their junior year, and for admission to upper level HIMA courses (3000-4000).
9. A criminal background check and drug test may be required at some affiliated clinical sites for training. Based on the results of the background check, an affiliated clinical site may determine that the student will not be allowed within their facility. This could result in the student's inability to successfully complete the requirements of the HIM program. In addition, a criminal background check may have an adverse impact on a student's ability to obtain a license or employment.

## Retention Policy

The Health Information Management retention policy requires the following:

1. Students must maintain a minimum overall combined grade point average of a 2.0.
2. Students must earn a grade of a "C" or better in all major courses, supporting Science, Business, Health Care Administration, English, and Mathematics courses. Failure to maintain a C in any of these courses will result in repeating the course the next semester the course is offered with an Advisor's approval.
3. Students who earn a grade less than a "C" in HIMA courses for more than one semester will be dismissed from the program.
4. Students who have been dismissed from the Health Information Management Program may apply for readmission. Students who request readmission should present evidence to the Admissions and Retention Committee of a substantial change in their circumstances which warrants reconsideration.

General Education Core Courses: A minimum of 69 semester hours including ACCT 2010; UNIV 1000; BISI 2150; 3230; BIOL 2210; 2211, 2220, 2221; CHEM 2500; ENGL 1010, 1020, HCAP 4500; 4900; HIST 2010, 2020; MATH 1110; MGMT 3010; 4030; PHIL 1030; COMM 2200; ECON 2010; SOCI 3000; Humanities/Fine Arts Elective (3 semester hours); Social/Behavioral Sciences Elective (3 semester hours); English Literature (3 semester hours).
Departmental Requirements for the Bachelor of Science in Health Information Management

Major Core: A minimum of 51 hours including HIMA 1010, 1040, 2020, 2100, 2200, 2250, 2300, 2350, 2400, 2704, 3010, 3020, 3030, 3300, 4000, 4400, 4424 and 4430.
Students who have completed the following courses: ACCT 2010, ECON 2010, MGMT 3010, MGMT 4030, BISI 3230 in the HIM curriculum and are interested in obtaining a minor in general business are required to take an additional three (3) credit hour course in database systems (BISI 4150). Please contact the College of Business for additional information.

Suggested Four-Year Plan for students entering at the freshman level:

Plan I
Bachelor of Science in Health Information Management FRESHMAN YEAR
FALL SEMESTER UNIV 1000 HR SPRING SEMESTER 1 ENGL 1020HR

| ENGL 1010 | 3 | HUM/FINE ARTS | 3 |
| :---: | :---: | :---: | :---: |
| MATH 1110 | 3 | BIOL 2220/2221 | 4/0 |
| BIOL 2210/2210L | 4/0 | ACCT 2010 | 3 |
| BISI 2150 | 3 | HIMA 1010 | 1 |
|  | 14 |  | 14 |
|  | SOPHOMORE YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | R HR |
| COMM 2200 | 3 | Soc./Behav. Science | 3 |
| HIST 2010 | 3 | BISI 3230 | 3 |
| SOCI 3000 | 3 | HIST 2020 | 3 |
| HIMA 1040 | 3 | ENGL Literature | 3 |
| PHIL 2010 | 3 | ECON 2010 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | R HR |
| MGMT 3010 | 3 | MGMT 4030 | 3 |
| HIMA 2020 | 3 | HIMA 2300 | 3 |
| HIMA 2100 | 3 | HIMA 2350 | 3 |
| HIMA 2200 | 2 | HIMA 2400 | 3 |
| HIMA 2250 | 2 | HIMA 3030 | 3 |
| CHEM 2500 | 3 |  |  |
|  | 16 |  | 15 |

## SUMMER

| SUMMER SESSION <br> HIMA 2704 | $\begin{aligned} & \mathrm{HR} \\ & 3 \\ & \hline 3 \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | SENIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIMA 3010 | 2 | HIMA 4424 | 6 |
| HIMA 3020 | 3 | HIMA 4430 | 3 |
| HIMA 3300 | 2 | HCAP 4900 | 3 |
| HIMA 4000 | 3 |  |  |
| HIMA 4400 | 3 |  |  |
| HCAP 4500 | 3 |  |  |
|  | 16 |  | 12 |

Total Credit Hours Required: 120
Suggested Two-Year Plan: for students with an Associate Degree in Health Information Technology. All general education requirements of the University must be met.

## Plan II

| $\begin{aligned} & \text { Plan II } \\ & \text { JUNIOR YEAR } \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ACCT 2010 | 3 | Hum/ Fine Arts | 3 |
| HIST 2020 | 3 | SOCI 3000 | 3 |
| ECON 2010 | 3 | PHIL 1030 | 3 |
| CHEM 2500 | 3 | HIMA 3030 | 3 |
| HIMA 3010 | 2 | BISI 3230 | 3 |
| ENGL Literature | 3 |  |  |
|  | 17 |  | 15 |
| SUMMER SESSION |  |  |  |
| MGMT 30103 |  |  |  |
| MGMT 4030 3 |  |  |  |
| 6 |  |  |  |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIMA 3020 | 3 | HIMA 4424 | 6 |
| HIMA 3300 | 2 | HIMA 4430 | 3 |
| HIMA 4000 | 3 | HCAP 4900 | 3 |
| HIMA 4400 | 3 |  |  |
| HCAP 4500 | 3 |  |  |
|  | 14 |  | 12 |

Total Hours for Degree requirements (Option II): 64 Credit Hrs.

Suggested Three-Year Plan for students entering at the freshman level:

| Plan III <br> Bachelor of Science Degree in Health Information Management |  |  |  |
| :---: | :---: | :---: | :---: |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | ECON 2010 | 3 |
| HUM/FINE ARTS | 3 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | COMM 2200 | 3 |
| MATH 1110 | 3 | BIOL 2220/2221 | 4/0 |
| BIOL 2150/2210L | 4/0 | HIMA 1040 | 3 |
| BISI 2150 | 3 |  |  |
| HIMA 1010 | 1 |  |  |
|  | 18 |  | 16 |
| SUMMER SESSION |  |  |  |
| XTREME HR |  |  |  |
| ACCT 2010 | 3 |  |  |
| MAYMESTER |  |  |  |
| HIST 2010 | 3 |  |  |
| SUNSATIONAL |  |  |  |
| HIST 2020 | 3 |  |  |
|  | 9 |  |  |
| SOPHOMORE |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIMA 2100 | 3 | HIMA 2300 | 3 |
| HIMA 2020 | 3 | HIMA 2350 | 3 |
| HIMA 2200 | 2 | HIMA 2400 | 3 |
| HIMA 2250 | 2 | HIMA 3030 | 3 |
| CHEM 2500 | 3 | MGMT 4030 | 3 |
| MGMT 3010 | 3 |  |  |
|  | 16 |  | 15 |
| SUMMER SESSSION |  |  |  |
| XTREME HR. |  |  |  |
| SOCI 3000 | 3 |  |  |
| MAYMESTER |  |  |  |
| BISI 3230 | 3 |  |  |
| SUNSATIONAL |  |  |  |
| HIMA 2704 | 3 |  |  |
|  | 9 |  |  |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIMA 3010 | 2 | HIMA 4424 | 6 |
| HIMA 3020 | 3 | HIMA 4430 | 3 |
| HIMA 3300 | 2 | HIMA 4900 | 3 |
| HIMA 4000 | 3 |  |  |
| HIMA 4400 | 3 |  |  |
| HCAP 4500 | 3 |  |  |
|  | 16 |  | 12 |
| SUMMER SESSION |  |  |  |
| XTREME HR |  |  |  |
| PHIL 1030 | 3 |  |  |
| MAYMESTER |  |  |  |
| ENGL LIT | 3 |  |  |
| SUNSATIONAL |  |  |  |
| SOCI/BEHAV | 3 |  |  |
|  | 9 |  |  |

Total Credit Hours Required: 120

Adjunct Instructional Staff and Clinical Affiliation Supervisors include: Shonda Cannon RHIT, Baptist Hospital, Nashville, TN; Nashville General Hosp., Nashville, TN; L. Ellis, RHIT, Gateway Medical Center, Clarksville, TN; P. Freeman, RHIA, West Meade Place Center, Nashville, TN;,A. Coleman, RHIA, Health at Richland Place, Nashville, TN; R. Green, RHIT, Middle TN Medical Center, Murfreesboro, TN; S. Stephenson, RHIA, Northcrest Medical Center, Springfield, TN; A. Dixon, RHIA, Vanderbilt Medical Center, Nashville, TN; B. Grossheim, RHIT, Williamson Medical Ctr., Franklin TN; N. Coke, RHIA, Maury Regional Hosp., Columbia TN; K. Beard, Matthew Walker Comprehensive Health Ctr., Nashville TN; T. Perkins, THIA, Meharry Medical Group, Nashville TN; L. K. Tillman, RHIA, Veterans Affairs medical Ctr. For Nashville and Murfreesboro, TN; J. Duer, RHIA, St. Thomas Hosp., Nashville, TN; J. Kodentrz, RHIT, Sumner Regional Medical Ctr., Gallatin TN; E. Berry, RHIA, LeBonheur Children's Medical Hosp., Memphis, TN.

## Accreditation

The Health Information Management Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)

## Course Descriptions

Health Information Management (HIMA)
HIMA 1010 Introduction to Health Record Management (1). This course is designed for health related majors who have interest in learning more of health records and documentation practices in various health care delivery systems. The course focuses on the purpose and use of the health record, the role of the health information management department, and its relationship with other services within the health care facility. Prerequisites: None
HIMA 1040 Medical Terminology (3). A study of the language of medicine with emphasis on body systems, prefixes, suffixes, root terms, pronunciation and spelling. Emphasis on surgical instruments and procedures, diseases, laboratory tests, clinical procedures, and abbreviations for each system. Terms related to cancer medicine, radiology, nuclear medicine, pharmacology, psychiatry, systemic disorders, and autopsy procedures will be included. Prerequisites: BIOL 2210, 2211 with a grade of a C or better. Corequisite: BIOL 2220, 2221.

HIMA 2020 Foundations of Health Information Management (3). A study of Health Information Management systems with emphasis on health care delivery systems; the health information management profession; regulatory and accrediting requirements of patient care data; health care data development, content, structure, and use; data collection, quality, access and retention of paper-based records, electronic information, and image-based records. This course requires a laboratory component (2 lecture \& 2 lab hours/week). Prerequisites: Completion of HLSC 1000; BIOL 2210, 2211, 2220, 2221; BISI 2150;
HIMA 1010, 1040 with a minimum grade of a C or better. Corequisites: HIMA 2100, 2200, 2250. Student must be accepted into the HIMA program and/or with instructor's approval.
HIMA 2100 Fundamentals of Medical Science (3). A study of the nature, cause, treatment and management of pathologic, microbiologic and clinical disease processes. Prerequisites: BIOL 2210, 2211, 2220, 2221; HIMA 1010, 1040.

HIMA 2200 Legal and Ethical Aspects of Health Information (2). The American legal and court systems, terminology and procedures; principles of liability; patient record requirements with emphasis on regulations for content, retention, and destruction; access to health information; confidentiality and informed consent; the judicial process of health information; HIPAA privacy standards, fraud and abuse; specialized patient records; risk management and quality assessment of patient records as it relates to internal and external reporting; HIV information; computerized patient records with emphasis on accreditation, licensure; liability issues and ethical standards for health information practices. Prerequisite HIMA 1010. Corequisites: HIMA 2020, 2100, 2250.
HIMA 2250 Health Statistics and Analysis (2). A study of the basic knowledge and skills in health statistics and focus on the applications of the techniques for analyzing and calculating hospital, healthcare data, and vital statistics for administrative use and health care planning and decision making utilizing manual and computerized methods and tools for graphically displaying and reporting data. Prerequisite: MATH 1110. Corequisites: HIMA 2020, 2100, 2200.

HIMA 2300 Alternative Health Record Systems and Registries (3). A course designed to expose students to health record management in a non-traditional healthcare setting with focus on health record content and structure; regulatory and accreditation requirements; data access, collection, and retention. The overall purpose, organization, development, and maintenance of various registries and indexes will be discussed. Field trips will be required as part of the classroom experience. This course requires a laboratory component (2 lecture \& 2 lab hours/week). Prerequisites: HIMA 1010, 2020, 2100, 2200, 2250. Corequisites: HIMA 2350, 2400.

HIMA 2350 Coding and Classification of Health Data (3). An introduction to ICD-10-CM/PCS classification and coding of symptoms, diseases, operations, and procedures with emphasis on the UHDDS; basic coding steps and guidelines; coding guidelines for operations and procedures; supplementary classifications; signs \& symptoms; and ethical coding standards. This course requires a laboratory component (2 lecture \& 2 lab hours/week) Prerequisites: BIOL 2210, 2211, 2220, 2221; HIMA 1010, 1040, 2100. Corequisites: HIMA 2300, 2400.

HIMA 2400 CPT/HCPCS Coding Classification Systems (3). A basic introduction to CPT and HCPCS coding classification systems for ambulatory care with focus on their structure, application, and purpose as well as related reimbursement issues. Activities for this course will include coding, classification, and indexing of procedures in CPT/HCPCS for the purpose of standardization, retrieval, and analysis. This course requires a laboratory component (2 lecture \& 2 lab hours/week). Prerequisites: BIOL 2210, 2211, 2220, 2221; HIMA 1010, 1040, 2100. Corequisites: HIMA 2300, 2350.

HIMA 2704 Directed Professional Practice and Seminar in Health Information Services (3). Students are assigned to health information centers during the summer for practice experience under the direct supervision of either an RHIA or RHIT. Students will gain experience through observation and demonstration in applying theory and knowledge of technical aspects of Health Information Management previously and currently studied. A seminar will be held to discuss the experiences acquired during directed professional practice. Focus will be on presentation of the outcome of assigned projects and activities. Capstone examination will be administered to evaluate student competency-based knowledge at the technical level in Health Information Management. Prerequisites: Completion of HLSC 1000; BIOL 2210, 2211, 2220, 2221; HIMA 1010, 1040, 2020, 2100, 2200, 2250, 2300, 2350, 2400. All HLSC, BIOL, and HIMA courses completed with a minimum grade of a C or better. An overall minimum grade point average of C or better.

HIMA 3010 Healthcare Billing (2). A study of health insurance process and responsible health care payers. The course includes discussion on professional and uniform billing; the claim process; managed care including accounts receivable, collections, and terminology; electronic data interchange (EDI); commercial plans; federal and state plans; workers compensation and disability compensation programs. Prerequisites: HIMA 2020, 2300, 2350, 2400.

HIMA 3020 Current Issues in Health Information Management (3). A study of trends, updates and practical problems related to Health Information Management. Other topics include perspectives in health care. Prerequisites: Junior standing in HIMA curriculum or with permission of the instructor.

HIMA 3030 Quality Assessment and Performance Improvement (3). The study of quality management in healthcare with emphasis on quality improvement, utilization review, risk management, clinical outcomes management, case management/critical path concepts, and accreditation and licensure standards. Student will acquire knowledge, skills, and tools needed to coordinate quality and resource management activities in healthcare facilities. This course requires a laboratory component. Prerequisites: HIMA 1010, 2020, 2100, 2200, 2250, 2300, 2350, 2400, 2704.

HIMA 3300 Advanced Coding and Classification of Health Data (2). An advanced study of ICD-9-CM coding and reimbursement systems with special emphasis on the complexities of coding related to principle diagnosis selection and sequencing, problem diagnoses and procedures by body system, DRG assignment and PPS regulations for DRG validation, case-mix concepts, and methods to ensure coding accuracy in automated and manual coding systems. This course requires a laboratory component (1 lecture \& 2 lab hours/week). (Formerly HIM 330) Prerequisites: BIOL 2210, 2211, 2220, 2221; CHEM 2500; HIMA 2100, 2350, 2400. This course is designed for HIMA majors only or with permission of the HIMA instructor.

HIMA 4000 Computerized Health Information Systems (3). Development of managerial skills in Systems Analysis and Computer Applications in Health Information Management. Prerequisites: MATH 1110; BISI 2150, 3230; HIMA 2020.

HIMA 4400 Organization and Management of Health Information Services (3). This course is designed to provide students with managerial skills in the areas of planning, organizing, directing, and controlling. Emphasis will be on the processes of budgeting, staffing, directing, decision making, development and evaluation of policies and procedures, managing projects, and establishing standards for the quality of health information services. Special assignments include in-service education. Prerequisites: MGMT courses, senior standing in the HIMA curriculum with a minimum grade point average of 2.0 or better.

HIMA 4424 Management Professional Practice in Health Information Services (6). Students are assigned to a Health Information center for supervised Management Professional Practice experience to observe employee relations and interact with healthcare professionals and consumers while under the direct supervision of a qualified Registered Health Information Administrator. Students are provided the opportunity to apply the skills and knowledge previously gained through classroom, directed professional practice, and laboratory experiences in carrying out management and administrative activities. A pre-practice seminar will be held to discuss practice expectations and explore potential methods of identifying and solving problems that may be encountered during management practice. Prerequisites: Completion of all HIMA, MGMT, BIOL, HLSC and HCAP courses with a minimum grade of a C or better, have an overall minimum grade point average of $C$ (2.0) or better, and senior standing in the HIMA curriculum.

HIMA 4430 Management Professional Practice Seminar (3). Student will participate in seminar to discuss the experiences acquired during Management Professional Practice. Focus will be on presentation of the outcome of assigned projects and activities; employment opportunities and preparation for job search; and discussion on graduate and professional studies. Students will participate in preparation for the registration examination. Focus will be on testtaking skills and assimilation of AHIMA required competencies. Capstone examination will be administered to evaluate student competency-based knowledge of Health Information Management. Prerequisites: Completion of all HIMA, MGMT, BIOL, HLSC and HCAP courses with a minimum grade of a C or better have an overall minimum grade point average of $C$ or better (2.0), and senior standing in the HIMA curriculum Corequisite: HIMA 4424.

# Department of Public Health, Health Administration and Health Sciences (PHHAHS) 

Rosemary Theriot, Ed.D. MSPH, Professor and Department Chair Avon Williams Campus, 4th Floor<br>(615) 963-7367

## Health Care Administration and Planning

Faculty: R. Briggs, E. Brown, W. Burrell, C. Brown, W. Inman, O. Johnson, M. Kanu, K. Patel. R. Theriot, and E. Williams

General Statement: The Health Care Administration and Planning (HCAP) program is designed to prepare individuals for leadership roles in the health care field. The curriculum includes instruction in health management, business, decision making, and health planning. An emphasis is placed on management and decision-making techniques which lead to effectiveness and efficiency in a supervisory position.

The BS degree in Health Care Administration and Planning is awarded after satisfactory completion of a minimum of 120 semester hours including one summer field placement at the end of the junior year and the completion of 30 semester hours of coursework in the major. Graduates are prepared to
assume entry-level management positions in various health care settings or to continue their education in a variety of disciplines in masters' degree programs.

## Admission Requirements

Students who wish to pursue the HCAP major must first be accepted for admission to Tennessee State University.

Applications for admission to the Program are accepted from students who have completed the first two years of prerequisites (including transfers). The HCAP Admissions Committee will consider applications from candidates who present the following qualifications:

## Acceptance to Tennessee State University:

1. Completion of first year HCAP curriculum with a grade point average of 2.5 (on a 4.0 scale). Consideration will be given to relevant work experience when considering applicants who fall below this requirement.
2. Two letters of recommendation from individuals who have known the applicant for at least two years (time lengths will be waived for recommendations from employers).
3. An interview with the Admissions Committee or an out-of-town agency designated by the Committee.
4. Statement of Purpose
5. Manuscript

## Retention Policy

The Health Care Administration and Planning retention policy is as follows:

1. Students must maintain a minimum cumulative grade point average of 2.0.
2. Failure to maintain a $C$ in any of these courses will result in repeating the course the next semester the course is offered with approval of the Advisor.
3. Students who earn a grade less than a "C" in HCAP courses for more than one semester will be dismissed from the program.
4. Students who have been dismissed from the HCAP program may apply for readmission. Students who request readmission should present evidence to the Admissions Committee of substantial change in circumstances warranting reconsideration.
5. If a student transfers from another institution or academic program, each course that was taken will be assessed individually.

## Criminal Background Check:

A criminal background check may be a requirement at some affiliated clinical sites for training. Based on the results of the check, an affiliated clinical site may determine that it will not accept a student within the facility. This could result in a student's inability to successfully complete the requirements of the HCAP program. In addition, a criminal background may preclude licensure or employment.

Departmental Requirements for the Bachelor of Science Degree in Health Care Administration \& Planning:

Major Core Courses: (43 credit hours) HCAP 2010, 2011, 2100, 3100, 3200, 3310, 3900, 4000, 4010, 4200, 4500, 4700, 4800, 4900; 4930; HCAP Elective

Suggested Four-Year Plan:
Bachelor of Science Degree in Health Care Administration and Planning

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | Humanities/ Fine Arts | 3 |
| SOCI 2010 | 3 | BIOL 2220/2221 | 4 |
| BIOL 2210/2211 | 4 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | MATH 1110 | 3 |
| Humanities/Fine Arts | 3 | POLI 2010 | 3 |
|  | 14 |  |  |
|  | SOPHOMORE YEAR |  |  |
|  |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ACCT 2010 | 3 | ACCT 2020 | 3 |


| ENGL Literature | 3 | HIST 2020 | 3 |
| :--- | :---: | :--- | :---: |
| SOCI 2300 | 3 | COMM 2200 | 3 |
| HIST 2010 | 3 | HIMA 1040 | 3 |
| BISI 2150 | 3 | HPER Activity | 1 |
| HIMA 1010 | 1 |  |  |
|  | 16 |  |  |
|  | JUNIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ECON 2010 | 3 | ECON 2020 | 3 |
| HCAP 3310 | 3 | MGMT 3010 | 3 |
| HCAP 3100 | 3 | HCAP 2100 | 3 |
| HCAP 2010/2011 | 3 | HCAP 3900 | 3 |
|  |  | HCAP 4200 | 3 |
|  |  |  | 15 |


| SUMMER |  |
| :--- | :---: |
| SUMMER SESSION | HR. |
| HCAP 4000 | 6 |
| HCAP 4010 | 1 |

(Field Placement Practicum and capstone)

|  | SENIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HLSC 4010 | 3 | HCAP 4700 | 3 |
| HCAP Elective* | 3 | HCAP 4800 | 3 |
| MGMT 4030 | 3 | HCAP 4500 | 3 |
| HCAP 4900 | 3 | MGMT 4040 | 3 |
|  |  | HCAP 3200 | 3 |
|  |  | HCAP 4930 | $\underline{\underline{0}}$ |
|  |  |  | 15 |

*Recommended Electives (choose one)
HCAP 3800 Introduction to Public Health
HLSC 4300 Introduction to Epidemiology
HLSC 3020 Critical Health Issues
HLSC 3040 Maternal and Child Health
HLSC 4020 Environmental and Sanitary Health
HLSC 4500 Contemporary Issues in Clinical Geriatric Care
MGMT 4050 Organization Behavior
MGMT 3020 Operations Management
SOCI 3450 Cultural-Social Aspects of Health Care
SOWK 4700 Social Gerontology

## Accreditation

The Health Care Administration and Planning Program is certified by the Association of University Programs in Health Administration (AUPHA) and was recently re-affirmed for six years with no stipulations.

## Course Descriptions

## Health Care Administration and Planning (HCAP)

HCAP 2010 Introduction to Health Care Organization (3). Provides an overview of the American Health System with an emphasis on acquainting students with various aspects of the entire health care field, including terminology, facilities, placements, and people. The subject areas include a history of the development of the American Health Care System, a descriptive analysis of the various levels of health care delivery and the patient care system, exposure to financing of health care, and an introduction to governmental involvement in the health care system. (Formerly HCA 201) Prerequisites: None

HCAP 2011 Writing Essentials in the Health Care Organization (0). Lab provides an introduction to essential concepts for writing in the health care industry. The topics covered will include the styles of writing such as APA; the appropriate form and formats used in professional research; the preparation of meeting and conference materials for health care professionals; and the preparation of presentations and delivery. Students must pass the course with a satisfactory score of 80 or better) in order to be accepted into Health

Care Administration and Planning and Health Sciences programs. Corequisite: HCAP 2010. Prerequisites: ENGL 1010; 1020; HIMA 1010.

HCAP 2100 Approaches to Planning in Health Care (3). The principal theories and methodologies of the planning discipline will be studied via lectures, reading, case studies, and guest lectures. The philosophical foundations of various methodologies and those of the planning process will be examined. Specific interpretation and application of comprehensive health planning legislation will be considered. Emphasis will also be given to the concepts of regionalization. This course is recommended for all those considering post-graduate study in planning. (Formerly HCA 210) Prerequisites: HIMA 1010; HCAP 2010/2011.

HCAP 3100 Health Care Economics (3). The economics of the health care industry will be reviewed with an emphasis on the supply and demand for healthcare services. Critical issues that will be examined include: the evolution of the healthcare industry in the United States, economic mechanisms of the industry, methods of payment, cost effectiveness, cost/benefit analysis, national health insurance plans, financial incentives for physician reimbursements, and governmental subsidization and control. The economics of the present health care system will also be analyzed in relation to poor and minority groups. The United States healthcare system will be discussed from the evaluation of the World Health Organization. (Formerly HCA 310) Prerequisites: HCAP 2010/2011, 2100; ECON 2010.

HCAP 3200 Introduction to Facilities Law (3). This course provides an introduction to the specifics of health related legislation and programs which includes the implications for providers and consumers of health care. The legal principles and issues for medical caseworkers, along with liability of health care facilities and staff for injuries to patients, and abuses of patient rights by the health care system will be examined. The topics also include malpractice suits and legislation, HIPAA compliance, e-health, collection of bills, labor laws, and informed consent medical and surgical procedures. (Formerly HCA 320) Prerequisites: HCAP 2010/2011, 2100.

HCAP 3310 Sociology of Health, Illness, and Disease (3). This course will examine social and behavioral implications of illness and disease as it relates to diverse populations from prenatal care to palliative care. Topics will include utilization of health services as it relates to gender, age, religion, socioeconomic status, race, and ethnicity; health behavior and belief; and barriers to communication between the health provider and patient. (Formerly HCA 330) Prerequisites: HCAP 2010/2011; SOCI 2010.
HCAP 3900 Communication and Technical Writing (3). This course will examine techniques in developing written documents commonly prepared by the health administrator. Students will be exposed to technical writing skills required in preparing documents such as letters, memos, emails, reports, proposals, and resumes. Oral presentation skills will also be emphasized. Also, attention will be given to the development of writing skills and the special communication needs of individual students. (Formerly HCA 390) Prerequisites: ENGL 1010, 1020; COMM 2200; HCAP 2010/2011.

HCAP 4000 Field Placement (1-6). The internship is designed to give the student direct experience in various health care settings. The experimental component allows the student an opportunity to apply newly acquired normative and cognitive skills in an actual working situation. The areas from which students may choose are hospitals, state and federal government agencies, long-term care facilities, intermediate care facilities, group practices, insurance companies, the pharmaceutical industry, medical programs, and volunteer agencies. During the 12 -week placement, the summer between the junior and senior year, students will be required to submit mid-term and final reports to the Department. Prerequisites: Senior standing, completion of a minimum of 24 credit hours of HCAP major courses, and approval of advisor and department chair. Students will not be permitted to enroll in any coursework while enrolled in the internship. Students who would like their work experience in health care considered as a substitute for the internship must submit their request in the first semester of their junior year to the department chair for approval. (Formerly HCA 400).

HCAP 4010 Field Placement Capstone Course (1). The capstone course is designed to help students understand the role of health care managers by incorporating the principles and theories in the classroom with their practical experiences in the internship. Current issues and trends in health administration will be addressed through directed readings, case analysis, fieldtrips, and guest speakers. Prerequisites: HCAP 4000 and/or permission of instructor.
HCAP 4200 Health Care Management I (3). The application of management techniques to the administration of health care facilities will be examined. The various administrative management elements of
the health care systems approach to decision making, the establishment of management principles to complex and normative organizations; the understanding of demographic changes in the workforce and patient populations will be discussed. Also, the different levels of administrative management techniques will be discussed in this course. (Formerly HCA 420) Prerequisites: HCAP 2010/2011, 2100; ECON 2010; ACCT 2010; BISI 2150. [MGMT 3010]
HCAP 4500 Health Care Finance (3). The purpose of this course is to provide a solid foundation in health care finance and facilitate the student's understanding of financial management techniques. Upon the completion of this course, students will have a basic understanding of: cost inflation; selecting and tracking stocks; economic models of physician and hospital behavior; cost sharing and cost containment; economic buying and hospital accounting; marketing; pricing and specialization; cost effectiveness and costbenefit analysis; different forms of physician reimbursements; access to capital and debt financing; evaluation of financing alternatives; health planning and cost control. (Formerly HCA 450) Prerequisites: ACCT 2010, 2020; ECON 2010, 2020; HCAP 2010/2011, 3100.
HCAP 4700 Long-Term Care Administration (3). The administrative issues of care for long-term patients will be addressed with specific discussions about the aged, and primary and extended care of the aged. The peculiar social, cultural, and economic environment will be discussed as each is related to accessibility and availability of health and the aspects of administration in long-term care facilities. (Formerly HCA 470) Prerequisites: HCAP 2010/HCAP2011; HIMA 1010, 1040.
HCAP 4800 Principles of Managed Care Organizations (3). This course provides an overview of managed care and its past and current impact on the U.S. health care system. Topics include the impact of managed care on the role and relationships of primary care doctors, specialists, and hospitals; the origins of health maintenance organizations and other managed care organizations; and consumer patient protection laws. This course also explores public policy, regulatory, and financial managed care issues. (Formerly HCA 480) Prerequisites: ECON 2010; HCAP 2010/2011.

HCAP 4900 Health Care Research (3). An introduction to research design will be provided with an emphasis on the application of statistical and research techniques to problems of concern to the health care system. Students will be required to carry out a research problem to completion. (Formerly HCA 490) Prerequisites: Senior standing; HLSC 4010 or PSYC 2180.

HCAP/HLSC 4930 (0) Senior Seminar in Health Sciences - This course is designed as a culminating assessment experience for graduating seniors from the Public Health, Health Administration and Health Sciences (PHHAHS) Department. This course will serve as a platform to unify all academic experiences acquired by students matriculating in the PHHAHS department. On the completion of this course students should manifest their overall mastery of the PHHAHS competencies by passing the PHHAHS comprehensive examination. Students who do not receive a satisfactory grade of $70 \%$ or higher will not be eligible to graduate from the Public Health, Health Administration and Health Sciences Department with a Bachelor of Sciences Degree. Prerequisite: Graduating Senior in the Public Health, Health Administration and Health Sciences Department

## Health Care Administration and Planning Elective

HCAP 3800 Introduction to Public Health (3). This course is designed to help students develop an understanding and appreciation for the factors that affect health status and the personal and professional factors that contribute to personal and community health. Students will review existing and emerging theoretical perspectives relative to the interconnections between socioeconomic status (age, race/ethnicity, level of education, income) and current health care indicators. The course will allow students to evaluate future changes that may impact the provision of public health services and the practical application of principles for health care organizations. An overview of personal and public health issues will be covered including minority health concerns, the role of culture in influencing the adaptation of health attitudes, practices and behaviors, health objectives for the year 2020, and career opportunities in public health. (Formerly HCA 380) Prerequisite: HCAP 2010 or Permission of the instructor.

## Health Sciences

## Bachelor of Science Degree Program

Faculty: R. Briggs, E. Brown, W. Burrell, C. Brown, W. Inman, O. Johnson, M. Kanu, K. Patel, R. Theriot and E. Williams

The Department of Public Health, Health Administration and Health Sciences offers the Bachelor of Science degree in Health Sciences (HS). Students may obtain the BS in Health Sciences by completing a total of 120 credit hours. The BS in Health Sciences will provide: (1) the knowledge base and skills development for those seeking entry and intermediatelevel professional and service positions in health care agencies, organizations, and institutions in public, private, and non-profit sectors; (2) a degree completion program for associate-degree credentialed healthcare practitioners pursuing career advancement or a career change; and (3) a pre-professional program for students preparing to enter programs for which the master's degree is the licensing credential. Students may choose concentrations in Physical Sciences, Public Health, Therapeutic Studies, Communications and Sciences Disorders and a General track.

## Admission Requirements

Students who wish to pursue the Health Sciences major must first be accepted for admission to Tennessee State University. Applications are accepted year round from students who have completed all general education prerequisites (including transfers).

The Health Sciences Admission Committee will consider applications of candidates who present the following qualifications:

1. Acceptance to Tennessee State University.
2. Completion of the first year Health Sciences curriculum with a grade point average of 2.5 (on a 4.0 scale).
3. Two letters of recommendation from individuals who have known the applicant for at least two years (the time requirements will be waived for recommendations from employers).
4. Statement Purpose
5. Transcript

## Retention Policy

The Health Sciences retention policy requires the following:

1. Students must maintain a minimum cumulative grade point average of a 2.0.
2. Students must earn a grade of a "C" or better in all major courses, supporting Science, Business, English, and Mathematics courses. Failure to maintain a C in any of these courses will result in repeating the course the next semester the course is offered with the Advisor's approval.
3. Students who earn a grade less than a " $C$ " in Health Sciences courses for more than one semester will be dismissed from the program.
4. Students who have been dismissed from the Health Sciences program may apply for readmission.
5. Students who request readmission should present evidence to the Admissions Committee of substantial change in circumstances which warrants reconsideration.

Suggested four-year plans for the BS in Health Sciences is as follows:

> Bachelor of Science in Health Sciences
> General Concentration
> Suggested Four-Year Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | MATH 1110 | 3 |
| BIOL 2210/2211 | $4 / 0$ | BIOL 2220/2221 | $4 / 0$ |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Humanities/Fine Arts | 3 | PSYC 2010 | 3 |
| HPER Activity | 1 | Humanities/Fine Arts | 3 |
| SOCI 2010 | 3 |  |  |
|  | 15 |  | 16 |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIST 2010 | 3 | HIST 2020 | 3 |
| COMM 2200 | 3 | BISI 2150 | 3 |
| ENGL Literature | 3 | HIMA 1040 | 3 |
| CHEM 1110/1111 | $3 / 1$ | HPSS 4090 | 3 |
| HPER Activity | 1 | HPSS 3060 | 3 |
| HPER Activity | 1 |  |  |
|  | 15 |  | 15 |
|  | JUNIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HPSS 3030 | 3 | HLSC 4500 | 3 |
| PSYC 3530/4400 | 3 | HCAP 3100 | 3 |
| HLSC 3100 | 3 | HLSC 4300 | 3 |
| PSYC 3510 | 3 | HLSC 3020 | 3 |
| HCAP 2010/2011 | $3 / 0$ | HCAP 3800 | 3 |
|  | 15 |  | 15 |
|  |  | SENIOR YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HCAP 3310 | 3 | HCAP 4900 | 3 |
| HLSC 3110 | 3 | HLSC 4010 | 3 |
| HLSC 4040 | 3 | HLSC Elective | 3 |
| HLSC Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
|  |  | HLSC 4930 | 0 |
|  | 15 |  | 15 |

Bachelor of Science in Health Sciences
Physical Sciences Concentration Suggested Four-Year Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | PSYC 2010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| BIOL 2210/2211 | $4 / 0$ | BIOL 2220/2221 | $4 / 0$ |
| Humanities/Fine Arts | 3 | MATH 1710 | 3 |
| SOCI 2010 | 3 | Humanities/Fine Arts | 3 |
|  |  |  | 16 |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL Literature | 3 | COMM 2200 | 3 |
| BISI 2150 | 3 | HPSS 3140 | 3 |
| HIST 2010 | 3 | HIMA 1040 | 3 |
| BIOL 1110/1111 | $4 / 0$ | HIST 2020 | 3 |
|  |  | BIOL 1120/1121 | $4 / 0$ |
|  | 13 |  | 16 |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HCAP 2010/2011 | $3 / 0$ | HLSC 4010 | 3 |
| HCAP 3800 | 3 | HLSC 4210 | 3 |
| HLSC 3000 | 3 | CHEM 1120/1121 | 3 |
| HLSC 3100 | 3 | HLSC Elective | $3 / 1$ |
| CHEM 1110/1111 | $3 / 1$ |  |  |
|  |  |  | 13 |


| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| HLSC 4300 | 3 | HLSC 3110 | 3 |
| PHYS 2010/2011 | $3 / 1$ | PHYS 2020/2021 | $3 / 1$ |
| HLSC 3050 | 3 | HLSC 4500 | 3 |
| PSYC 3530/4400 | 3 | HCAP 4900 | 3 |
| HCAP 3100 | 3 | Elective | 3 |
|  |  | HLSC 4930 | 0 |
|  | 16 |  | 16 |

Bachelor of Science in Health Sciences
Public Health Concentration
Suggested Four-Year Plan

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | PSYC 2010 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| SOCI 2010 | 3 | MATH 1110 | 3 |
| BIOL 2210/2211 | 4/0 | BIOL 2220/2221 | 4/0 |
| Humanities/Fine Arts | 3 | Humanities/Fine Arts | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL Literature | 3 | Social/Behav. Sci. | 3 |
| HIMA 1010 | 1 | HIST 2020 | 3 |
| HIST 2010 | 3 | HPSS 3060 | 3 |
| Natural Sciences I | 3/1 | 1 Natural Sciences II | 3/1 |
| BISI 2150/COMP | 3 | COMM 2200 | 3 |
|  | 14 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR S | SPRING SEMESTER | HR |
| HCAP 2010/2011 | 3/0 H | HLSC 3010 | 3 |
| HCAP 3800 | 3 H | HLSC 3060 | 3 |
| HLSC 4300 | 3 H | HLSC 3040 | 3 |
| PSYC 3530/4400 | 3 E | Elective | 3 |
| HIMA 1040 | 3 H | HCAP 3100 | 3 |
|  | 15 |  | 12 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR S | SPRING SEMESTER | HR |
| HLSC 4010 | 3 H | HLSC 3020 | 3 |
| HLSC 3050 | 3 H | HCAP 4900 | 3 |
| HLSC 4040 | 3 | HLSC 4020 | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
|  |  | HLSC 4930 | 0 |
|  | 15 |  | 15 |

Bachelor of Science in Health Sciences
Therapeutic Studies Concentration
Suggested Four-Year Plan

|  | FRESHMAN YEAR <br> FALL SEMESTER |  |  |
| :--- | :---: | :--- | :---: |
| HR | SPRING SEMESTER | HR |  |
| UNIV 1000 | 1 | Humanities/Fine Arts | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| SOCI 2010 | 3 | MATH 1110 | 3 |
| Humanities/Fine Arts | 3 | PSYC 2010 | 3 |
| BIOL 2210/2211 | $4 / 0$ | BIOL 2220/2221 | $4 / 0$ |
|  | 14 |  | 16 |
|  | SOPHOMORE YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL Literature | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | COMM 2200 | 3 |
| Natural Science | $4 / 0$ | HPSS 3060 | 3 |
| HIMA 1010 | 1 | PHIL 3360/SOCI 3450 | 3 |
| HPER | 1 | HIMA 1040 | 3 |
|  |  | 15 |  |

JUNIOR YEAR
FALL SEMESTER
HCAP 2010/2011
HCAP 3800
HLSC 3000

HR SPRING SEMESTER
3/0 HLSC 4010
3 PSYC 3300
3 PSYC $\qquad$

HLSC 3100
HPSS 3140 $\qquad$ HLSC Elective
Guided Elective
3 15

| 3 |
| :---: |
| 15 |

SENIOR YEAR
FALL SEMESTE
HLSC 4300
HLSC 2140
PSYC 3530/4400
HCAP 3100
PSYC 3510

| HR | SPRING SEMESTER | HR |
| :---: | :--- | :---: |
| 3 | HCAP 4900 | 3 |
| 3 | HLSC 3020 | 3 |
| 3 | HLSC 3110 | 3 |
| 3 | HLSC Elective | 3 |
| 3 | Elective | 3 |
|  | HLSC 4930 | $\frac{0}{15}$ |
| 15 |  | 15 |

## Course Descriptions <br> Health Sciences (HLSC)

HLSC 2140 Physics Principles for Health Sciences (3)) This course provides students with the opportunity to learn basic physics principles including those of lever systems, laws of motion, forces and force interactions, temperature, and heat. These concepts are then applied to the environment and the human body so that students may acquire a sound basis for their subsequent work in HLSC 4140, Biomechanics and Gross Anatomy. Prerequisite: MATH 1110.
HLSC 3000 Ethics and Professionalism in Health Sciences (3) This course presents current issues and information on professionalism and medical ethics for Health Sciences professionals. Specific areas that will be investigated include: what it means to be a professional, career development strategies, the role of service for the professional, ethical issues for healthcare providers, the ongoing process of developing an ethical practice, withdrawing care from the terminally ill, and other current issues in the national media. Prerequisite: Admission is open to all students formally admitted to Health Sciences Program or by permission of the instructor.
HLSC 3010 Consumer Health (3) This course provides students with the following: (1) a model for making informed consumer health related decisions; (2) current information involving informed decisions; and (3) mechanisms for continued consumer awareness and protection, i.e., sources of accurate consumer information and lists of consumer information and protection agencies. This course also examines the benefits and/or hazards associated with health related products, services and information presently available to the consumer. The methods and techniques of health fraud are analyzed. Emphasis is placed on the development of individual criteria for the potential selection and purchase of health products and services. Field trips may be required. Prerequisites: HCAP 3800 and junior standing.

HLSC 3020 Critical Issues in Health Care (3) This course examines current and future health issues within the United States. The purpose of the course is to expose students to some of the critical issues that will impact healthcare in the future. Some of these issues include the aging of the population, the supply and demand of heath care providers, the growing diversity of the U.S. population, the use of medical and information technologies in health care, and many more. Prerequisites: HCAP 2010/2011, 3800; HLSC 3050, or permission of Instructor.

HLSC 3040 Maternal and Child Health (3) This course describes the biological and physiological basis for health care to MCH populations including pregnant women, infants, and individuals through age 21. Using an evidence-based approach to MCH care, this course examines the use of current epidemiologic and analytic literature to evaluate the effectiveness of interventions and technologies used to prevent, diagnose, and treat clinical problems of women, mothers, infants, children, and adolescents. The course addresses the role of nutrition in the prevention of chronic diseases in women and children and its influence on normal childhood growth and development. Prerequisites: Completion of Natural Sciences requirement or consent of the instructor.

HLSC 3050 Health Promotion and Disease Prevention (3) This course introduces students to the basic concepts of epidemiology, health promotion, disease prevention, and their impact on the health status of culturally diverse and vulnerable individuals, families, small groups and communities. The focus is on health problems and potential interventions throughout the life of an individual. The principles of teaching/learning and the process of critical thinking are incorporated as they apply to the health professional. Prerequisite: HCAP 3800.

HLSC 3060 International Health (3) This course examines major trends and issues related to international health including health care systems, nutrition, family planning, distribution and the nature of communicable and chronic diseases, and preventive measures in selected countries. Special emphasis is placed on problems that can be prevented through health education programs. Prerequisite: None.

HLSC 3100 Complementary and Alternative Approaches to Health Care (3) This course serves as an introduction to a variety of health care options currently available in our society. Students will explore basic concepts of pharmacology, nutritional supplements, homeopathy, psychological effects on health, oriental medicine, techniques of healing movements, healing touch, and manipulation techniques. Students will be exposed to a variety of viewpoints and encouraged to critically evaluate different theories of health and health care. Prerequisites: Completion of Natural Sciences requirement.

HLSC 3110 Health Conditions in Function and Disability (3) To function within the health care system, health providers must be able to articulate their profession's concept of health within the context of medical management of common health conditions. Students learn how to search the World Wide Web to locate instructional resources and to gather clinically related evidence to solve problems. In this process, they learn about the underlying pathophysiology, diagnostic, and treatment procedures, while collaborating with other students in completion of online and face-to-face assignments. As students examine the internal and external factors that impact human health, they can learn about the care of common health conditions and roles of various practitioners. Prerequisites: Completion of Natural Sciences.

HLSC 4010 Introduction to Biostatistics (3) This course will examine the application of statistics based on three factors: (1) collecting, summarizing, presenting, analyzing, and interpreting data; (2) measuring central tendency and variation; and (3) investigating binomial and normal probability distributions, which are essential to today's health care professional. The topics include probability, confidence intervals and hypothesis testing using t-tests, chi-square, correlation, and regression. A brief introduction to ANOVA and multivariate analysis and emphasis on practical applications are discussed. Laboratory use of the personal computer in statistical problem solving is required. Prerequisite: MATH 1110.

HLSC 4020 Introduction to Environmental Health (3) This course provides an overview of the major areas of environmental health. The areas of emphasis include food protection, air, water and land pollution, hazardous waste, population concerns, and noise and radiation hazards. Prerequisite: None.

HLSC 4040 Public Health Policy (3) This course discusses the politics of health policy in terms of legislative and executive processes at the local, state and federal level; key forces involved including economic, social, ethical and political factors; and central players of importance, including special interest groups, lobbyists, the press, elected officials, legislative staff and public agencies. Prerequisite: HCAP 3800 or permission of instructor.

HLSC 4060 Principles of Geographic Information Systems for Health Organizations (3) This course provides a comprehensive overview of the concepts, functions, applications, technologies, and trends pertaining to automated geographic information systems (GIS) applicable to health sciences. Topics include GIS hardware and software considerations, data resources, and technical issues and applications in GIS. Prerequisite: None.

HLSC 4210 Anatomy for Health Professionals (3) This specialized course will consist of an in-depth study of the human musculo-skeletal system. The course will include, but is not limited to, the skeletal system which will include landmarks, the articular system, the muscular system with an emphasis on structure and function. The course will also include a discussion regarding human posture and human gait. This course is designed for students who intend to continue their education at the graduate level in professional areas such as occupational therapy, physical therapy, athletic training, and medicine. Prerequisites: Senior standing and departmental permission.

HLSC 4300 Introduction to Epidemiology (3) The objective of this course is to acquaint students with epidemiology as a scientific discipline and to facilitate the students' understanding of the role of epidemiology in health service planning and administration. An emphasis will be placed on various methods used in current epidemiologic studies of chronic diseases, public health, vital statistics, environmental sanitation and communicable disease control on a local, national, and global basis. (Formerly HCA 430) Prerequisites: BIOL 2210, 2211, 2220, 2221; HCAP 2010/2011; HIMA 1010, 1040; HLSC 4010.

HLSC 4500 Contemporary Issues in Clinical Geriatric Care (3) This course provides an assessment of geriatric issues important to health care professionals. Normal aging, disease processes associated with aging, psycho-social factors, health care service delivery, advocacy and other relevant considerations will be addressed with the goal of enhancing a practitioners' effectiveness in working with the geriatric population. Prerequisite: None.

HCAP/HLSC 4930 (0) Senior Seminar in Health Sciences - This course is designed as a culminating assessment experience for graduating seniors from the Public Health, Health Administration and Health Sciences (HAHS) Department. This course will serve as a platform to unify all academic experiences acquired by students matriculating in the PHHAHS department. On the completion of this course students should manifest their overall mastery of the PHHAHS competencies by passing the PHHAHS comprehensive examination. Students who do not receive a satisfactory grade of $70 \%$ or higher will not be eligible to graduate from the Public Health, Health Administration and Health Sciences Department with a Bachelor of Sciences Degree. Prerequisite: Graduating Senior in the Public Health, Health Administration and Health Sciences Department

## *Recommended Electives (choose one)

| COMM | 4230 | Organizational Communication |
| :--- | :--- | :--- |
| COMM | 3340 | Health Communication |
| HCAP | 3800 | Introduction to Public Health |
| HPSS | 3180 | Health Fitness Assessment and Program |
|  |  | Design |
| HPSS | 3330 | Principles of Resistance Training |
| SOCI | 3450 | Cultural-Social Aspects of Health Care |
| SOWK | 4700 | Social Gerontology |
| HCAP | 3310 | Sociology of Health, Illness and Disease |
| BIOL | 4270 |  |

## Bachelor of Science in Health Sciences Communication Sciences and Disorders Concentration Suggested Four-Year Plan

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | SOCI 2010 | 3 |
| MATH 1110 or 1030 | 3 | PSYC 2010 | 3 |
| SPTH 2800 | 3 | Humanities | 3 |
| BIOL 2210/2211 | $4 / 0$ | BIOL 2220/2221 | $4 / 0$ |
|  |  | 14 |  |
|  | SOPHOMORE YEAR |  |  |


| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| HIMA 1040 | 3 | SPTH 2500 | 3 |
| COMM 2200 | 3 | SPTH 2600 | 3 |
| ENGL 2110-2320 | 3 | SPTH 2601 | 1 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| HCAP 2010 | 3 | HUMANITIES | 3 |
| HCAP 2011 | 0 |  |  |
|  |  |  | 13 |

FALL SEMESTER HR. SPRING SEMESTER HR.
HLSC 21403 HLSC 30203
HCAP 31003
SPTH 3300 SPTH 3720
SPTH 35003
$\begin{array}{llll}\text { SPTH } 3710 & 3 & \text { SPTH } 3514\end{array}$
15
HLSC 3040
3
16

SENIOR YEAR
FALL SEMESTER HR. SPRING SEMESTER HR.
HLSC 31103
$\begin{array}{llll}\text { HLSC } 3050 & 3 & \text { SPTH } 4514 & 1\end{array}$
HLSC 30003
HCAP 3800
PSYC 3510

HCAP 4900
HCAP 4930
HLSC 4500

# Course Descriptions <br> Communication Sciences and Disorders Concentration (SPTH) 

SPTH 2500 Speech and Hearing Sciences (3). An introduction to the anatomy and physiology of the speech and hearing mechanisms. The course also includes study of the physiologic acoustics of the auditory periphery, neurophysiology of the speech and hearing systems, and an introduction to research tools in speech and hearing sciences.

SPTH 2600 Phonetics (3). An introductory course in phonetics, the science of speech sounds, which includes acoustics, articulatory and perceptual analysis of speech sounds and transcription of American speech into International Phonetics Alphabet (IPA). This course requires a concurrent laboratory experience: co-requisite - SPTH 2601. (To include elements of SPTH 4800).

SPTH 2601 Phonetics Laboratory (1). A remedial, self paced course for the individual who needs to improve his or her skills in phonetic transcription. This course is a co-requisite to SPTH 2600. (Formerly SPTH 2700).

SPTH 2800 Introduction to Human Communication (3). An introduction to the professions of speech pathology and audiology and the nature, types, and characteristics of speech, hearing, language and literacy problems. An overview of various methods used in identifying and managing communication disorders or language differences including approaches for individuals whose native language is not English is provided. (Formerly SPTH 310; SPTH 3100).

SPTH 3300 Clinical Methods in Articulation Disorders (3). This course is designed for student comprehension of the physical production of speech, normal developmental learning patterns of speech, various models of speech processes and theoretical bases for therapeutic procedures. Principles of diagnosis and remediation of articulation problems are emphasized. (Formerly SPTH 330) Prerequisite: SPTH 2600.

SPTH 3500 Language and Speech Development of Children (3). This course is designed to familiarize the undergraduate student with the normal development of language and speech. Students must understand the nature and purposes of communication, the element of the language and speech, the neurophysiological bases for language development, and the psychosocial aspects of the development of speech and language. (Formerly SPTH 350).

SPTH 3514 Observation of Clinical Practicum (1). Students will be required to complete 25 hours of clinical observation (assessment or therapy) in Speech Pathology and Audiology, as required by ASHA. Completion of these hours will be a prerequisite to any further practica experiences. (Formerly SPTH 351) Prerequisites: SPTH 2600, 3100, 3500.

SPTH 3710 Introduction to Audiology (3). An introduction to the anatomical and physiological aspects of hearing. The course will explore the etiology and types of hearing loss. It also focuses on theory and practice of techniques of auditory assessment with emphasis on pure tone, speech and impedance audiometry, and the interpretation of test results. (Formerly SPTH 3740) Prerequisite: SPTH 2500.

SPTH 3720 Identification and Appraisal of Speech and Language Disorders (3). This course prepares the student to administer and interpret results of various diagnostic procedures used by professionals in the area of speech pathology and audiology. The theoretical bases for the tests will be covered and basic skills in administration of the tests will be required. (Formerly SPTH 372) Prerequisites: SPTH 2600, 3100, 3300, 3500.

SPTH 3730 Intervention for Individuals with Hearing loss. (3). The history, principles and theory of speech-reading and auditory training, and introduction to amplifying systems including hearing aids. It includes a discussion of comprehensive care for the hearing impaired including psychological aspects and counseling. (Formerly SPTH 373) Prerequisite: SPTH 3740.

SPTH 4514 Clinical Practicum (1). An introduction to client management in the field of speech-language pathology and audiology, which will include planning, evaluation, treatment and follow-up. Student will receive a clinical assignment with direct supervision. This course may be repeated 1-3 times. It will be expected that students demonstrate increasing levels of competence. (Formerly SPTH 451) Prerequisite: SPTH 3514.

SPTH 4670 Speech Disorders in Children and Adults (3). This course examines the nature of congenital, developmental, and acquired speech disorders and conditions, such as voice, fluency, resonance, and motor speech disorders that can affect human communication are focused upon, along with principles of management strategies with children and adults.

SPTH 4760 Language Disorders in Children (3). The nature of language disturbances resulting from damage to the central nervous system, auditory impairment, environmental, social, and psychogenic influences. Managerial procedures are discussed while numerous diagnostic tests of language are demonstrated. (Formerly SPTH 476) Prerequisite: SPTH 3500.

## Department of Human Performance and Sport Sciences

James E. Heimdal, Ph.D., Department Chair 332 Gentry Complex<br>(615) 963-5581

Faculty: J. Bass, J. Gentry, E. Hamido, H. Hamilton, J. Heimdal, W. Johnson, T. Jones, J. Smith, and B. Thornton

General Statement: The Department of Human Performance and Sport Sciences prepares students for professional careers in the following areas of concentration: Teacher Education Physical Education and Teacher Education - Health Education, and Exercise Science.

The department focuses on the development of competent leaders for our diverse society, who will promote the essentials of quality living, as well as excellence in teaching and serving.

## Student Learning Outcomes:

1. All students will develop critical thinking skills, affective communication skills (written and oral), and technological skills.
2. All students will develop reflective skills needed to enhance other scholarly pursuits as lifelong learners.
3. All students will employ measurement and statistical concepts to assess student/client performance and program success, specific to their field of study.
4. All students will exhibit professional decision making skills and civic responsibility in a variety of ways in their specific field of study.

The departmental objectives are:

1. Prepare physical education teachers' pedagogical skills in the design of program activities which would guide youth in becoming physically active for the rest of their lives.
2. Prepare health educators to promote wellness by instructing others in the way of proper diet, stress management, psychological wellbeing, human sexuality, exercise and play, as well as other fundamental behaviors that improve the quality of life for all individuals and communities.
3. Prepare exercise science students for careers in community physical fitness entities: public, private, corporate, commercial and clinical settings.
4. Provide opportunities for students to learn the scientific basis and fundamentals of athletic training to prepare them for success in graduate curriculums of advanced degree programs.

## Retention/Graduation Requirements:

The department of HPSS offers three undergraduate concentration and two graduate concentrations. The Graduate Catalog should be checked for information on master's degree concentrations in Sport Administration and Exercise Science.

Completions of the undergraduate curricula terminate in a Bachelor of Science (B.S.) Degree. Retention requires that students meet all specific minimum hours for graduation with a GPA of 2.00 or higher in programs listed below. A Cumulative GPA of 2.5 or better may qualify a major for graduation with only one $D$ recorded in the Major Core.

Teacher Education Candidates are required to Pass Praxis I/ Pre-Professional Skills Test; achieve a cumulative GPA of 2.75 before applying for admission into the Teacher Education Program. Teacher education admission requirements are further specified in the introductory material included under the general heading: The College of Education.

Concentrations in Human Performance \& Sport Sciences
Four undergraduate concentrations are offered in the HPSS Department. The curriculum for each of these majors is presented below:

| CONCENTRATION | HRS. | DEGREE |
| :--- | :---: | :---: |
| Physical Education Teacher Education | 120 | B.S. |
| Health Education Teacher Education | 121 | B.S. |
| Exercise Science | 120 | B.S. |

The Department of HPSS offers two (2) minors: 1) Personal Training, and 2) Dance.

Physical Education-Teacher Education (PETE)
Major Core: UNIV 1000, HPSS 1510, HPSS 2060, HPSS 2010, HPSS 2020, HPSS 2270, HPSS 2030, HPSS 2040, HPSS 2270, HPSS 2310, HPSS 2704, HPSS 3080 (or 3040 or 1400 or 3630 ), HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340, HPSS 3350, HPSS 3710, HPSS 4005, HPSS 4020, HPSS 4240 (or 4250 or 4260), HPSS 4505.

Professional Education: EDCI 2010, PSYC 2420, HPSS 3100, EDSE 3330, HPSS 3710, EDCI 3870, HPSS 4030, EDCI 4705, HPSS 4720, EDCI 4620, EDRD 4910.
Health Education-Teacher Education (HETE)
Major Core: UNIV 1000, HPSS 1510, HPSS 2060, HPSS 2310, HPSS 3000, HPSS 3030, HPSS 3050, HPSS 3070, HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340, HPSS 4007, HPSS 4090, HPSS 4020, HPSS 4505.
Professional Education: EDCI 2010, PSYC 2420, HPSS 3720, EDCI 3870, EDSE 3330, EDCI 4705, HPSS 4720, EDCI 4620, EDRD 4910.

## Exercise Science

Major Core: HPSS 1510, HPSS 2010, HPSS 2020, HPSS 2030, HPSS 2040, HPSS 2060, HPSS 2270, HPSS 2310, HPSS 3030, HPSS 3040, HPSS 3050, HPSS 3080, HPSS 3130, HPSS 3140, HPSS 3310, HPSS 3340, HPSS 4006, 4007, HPSS 4020, HPSS 4150, HPSS 4240-4260, HPSS 4505, HPER 4730.

Guided Electives: HPSS 2320, HPSS 2330, HPSS 3330, HPSS 3060, HPSS 3180, HPSS 3190, HPSS 3200, HPSS 3300,

## Departmental Requirements for Minor

Dance: A minimum of 18 hours including: HPER 1012, HPER 1042, HPSS 2060, HPSS 2225 or 2226 or 2227 or 2228,
HPSS 2310, HPSS 3260, HPSS 3265, HPSS 3266, HPSS 3267, Electives - HPSS 2270 or HPSS 3230 and THEA 1010.

Personal Training: A minimum of 21 hours including: HPER 1031, HPSS 1510, HPSS 2310, HPSS 3130, HPSS 3140, HPSS 3330, HPSS 4007, and HPSS 4730. After completion of required classes, a national certification examination must be taken and passed in order to become a certified personal trainer.

Additional courses recommended for the Personal Training minor: HPSS 2060, HPSS 2320, HPSS 2330, HPSS 3060, HPSS 3180, HPSS 3190, HPSS 3310, HPSS 3410, HPSS 3550 and HPSS 4150.

## Suggested Four Year Program:

Bachelor of Science in Human Performance and Sport Sciences Physical Education - Teacher Education (K-12) (PETE)
120-Hour Curriculum Guide Sheet
FRESHMAN YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1110 or above | 2 | HPSS 1510 | 3 |
| Humanities Elective* | 3 | Humanities Elective* | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| HPSS 2060 | 3 | HPSS 2020 | 1 |
| PSYC 2010 | 3 | HPSS 2040 | 1 |
|  |  | HPSS 2070 | 2 |
|  |  | HPER 1011 | 1 |
|  |  |  | 15 |

NOTE: All HPSS majors must take HPER 1011 (Swimming) or pass Swimming Competency Test

SOPHOMORE YEAR
FALL SEMESTER HR SPRING SEMESTER HR
$\begin{array}{llll}\text { BIOL 1010/1011 } & 4 & \text { BIOL 1020/1021 } & 4\end{array}$
HIST 2010/2030 3 HIST 2020/2030 3
ENGL 2010-2322 3 PSYC 24203
EDCI 20103 HPSS 23103
HPSS 20101 HPSS 3100
HPSS 2030
HPER 1010-1053

| 1 |
| :---: |
| 1 |
| 16 |

16

NOTE: Pass Praxis I Examination; Apply for Admission to Teacher Education

|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HPSS 3340 | 3 | HPSS 3140 | 3 |
| HPSS 3310 | 3 | HPSS 4020 | 3 |
| HPSS 3130 | 3 | EDCI 3870 | 3 |
| HPSS 3080/3040/ 1400/ | 2 | EDRD 4910 | 3 |
| 3630 |  |  |  |
| HPSS 3350 | 2 |  | 3 |
| HPSS 4240/50/60 | $\frac{2}{\text { H2 }}$ HPSS 4005-7 | $\frac{15}{16}$ |  |

NOTE: Pass Praxis II apply for admission to Student Teaching

|  | SENIOR YEAR |  |  |
| :--- | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| EDSE 3330 | 3 | EDCI 4705 | 3 |
| EDCI 4620 | 6 | HPSS 4720 | 9 |
| HPSS 4505 | 3 |  |  |
| HPSS 3710 | $\frac{3}{}$ |  | 12 |

[^1]Suggested Four Year Program:
Bachelor of Science in Human Performance \&
Sport Sciences Exercise Science
120-Hour Curriculum Guide Sheet

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1110 or above | 3 | HPSS 1510 | 3 |
| Humanities Elective* | 3 | Humanities Elective* | 3 |
| HPSS 2060 | 3 | HPSS 2020 | 1 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| HPER 1010-1053 | 1 | HPER 2270 | 2 |
|  | 14 |  | 15 |

NOTE: All HPSS majors must take HPER 1011

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| Natural Science | 4 | Natural Science | 4 |
| Elective* |  | Elective* |  |
| HIST 2010/2030 | 3 | HIST 2020/2030 | 3 |
| ENGL 2010-2322 | 3 | HPSS 2310 | 3 |
| PSYC 2010 | 3 | HPSS 3340 | 3 |
| HPSS 2010 | 1 | HPSS 2040 | 1 |
| HPSS 2030 | 1 | HPER 1011 | 1 |
|  | 15 |  | 15 |
| JUNOR YEAR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| HPSS 3130/3140 | 3 | HPSS 3140/3130 | 3 |
| HPSS 4150 | 3 | HPSS 3310 | 3 |
| HPSS 4240-4260 | 2 | HPSS 3030 | 3 |
| HPSS 3040 | 2 | HPSS 3050 | 2 |
| HPSS Elec./Minor 3000/4000 | 3 | $\begin{aligned} & \text { HPSS Elec./Minor } \\ & 3000 / 4000 \end{aligned}$ | 2 |
| HPSS Elec./Minor $3000 / 4000$ | 2 |  |  |
|  | 15 |  | 14 |

Note: Pass Senior Exit Exam

| SENIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| HPSS 4505 | 3 | HPSS 4020 | 3 |
| HPSS 4006/4007 | 3 | HPSS 3080 | 2 |
| HPSS Elec./Minor | 3 | HPSS 4730 | 3 |
| 3000/4000 |  |  |  |
| HPSS Elec./Minor | 3 | HPSS Elec./Minor | 3 |
| 3000/4000 |  | 3000/4000 |  |
| HPSS Elec./Minor | 3 | HPSS Elec./Minor | 3 |
| 3000/4000 |  | 3000/4000 |  |
|  |  | HPSS Elec./ Minor | 3 |
|  |  | 3000/4000 |  |
|  | 15 |  | 17 |

*These courses must be selected from the list of approved General Education Courses.
**HPSS Elective/Minor selections should be selected in consultation with HPSS advisor.

Suggested Four Year Program:
Bachelor of Science in Human Performance \& Sport Sciences Health Education-Teacher Education (K-12) (HETE)
121-Hour Curriculum Guide Sheet
FRESHMAN YEAR

|  | FRESHAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1110 | 3 | HPSS 1510 | 3 |
| Humanities Elective* | 3 | Humanities Elective* | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| HPSS 2060 | 3 | HPSS 1011 | 1 |
| PSYC 2010 | 3 | HPSS 3000 | 3 |
|  | 16 |  | 16 |

NOTE: All HPSS majors must take HPER 1011 (Swimming)

## SOPHOMORE YEAR

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :--- | :---: |
| Natural Sciences | 4 | Natural Science | 4 |
| Elective* |  | Elective* |  |
| HIST 2010/2030 | 3 | HIST 2020/2030 | 3 |
| ENGL 2010-2028 | 3 | PSYC 2420 | 3 |
| EDCI 2010 | 3 | HPSS 2310 | 3 |
| HPSS 3050 | $\frac{3}{n n}$ | HPSS 3030 | 3 |
|  |  |  | 16 |

NOTE: Pass Praxis I Examination; Apply for Admission to Teacher Education

|  | JUNIOR YEAR |  |  |
| :--- | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HPSS 3130/3140 | 3 | HPSS 3130/3140 | 3 |
| HPSS 3310 | 3 | HPSS 4020 | 3 |
| HPSS 3070 | 3 | EDCI 3870 | 3 |
| HPSS 4090 | 3 | EDRD 4910 | 3 |
| HPSS 3340 | 3 | HPSS 4007 | 3 |
|  |  |  | 15 |

NOTE: Pass Praxis II apply for admission to Student Teaching

|  | SENIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| EDSE 3330 | 3 | EDCI 4705 | 3 |
| HPSS 4505 | 3 | HPSS 4720 | 9 |
| HPSS 3720 | 3 |  |  |
| EDCI 4620 | 6 |  | 12 |

*These courses must be selected from the list of approved General Education Courses

## Activity Courses Course Descriptions

Health, Physical Education \& Recreation (HPER)
HPER 1010 Physical Fitness Activities (1). A course designed so that students participate in exercises and various physical activities that can improve strength, flexibility and cardiovascular endurance.
HPER 1011 Elementary Swimming (1). A course designed to provide basic swim instruction, improve upon ones current swimming.

HPER 1012 Modern and Ballet Dance (1). An introduction to modern dance technique and ballet technique as well as elementary composition. The first half of the semester will be spent covering modern dance, the last half covering ballet. No prerequisites.
HPER 1013 Badminton (1). An elective course designed to teach the basic skills and strategies of badminton.

HPER 1014 Volleyball (1). An elective course designed to teach the basic skills, rules and regulations and strategies regarding power volleyball.

HPER 1015 Soccer (1). A course designed to provide students a variety of drills, skills and rules to play the game of soccer or appreciate the sport as a spectator.

HPER 1016 Golf (1). A course designed to teach elementary aspects of the game of golf. Special attention is placed on fundamentals and application of swing, strategies, rules, golf etiquette and other phases of golf.

HPER 1018 Basketball (1). A course that introduces students to the rules, regulations and basic skills necessary to participate in basketball and to improve understanding of basketball and team concept.

HPER 1019 Folk and Square Dance (1). A course designed to acquaint the student with the basic skills and techniques of folk and square dancing. Emphasis is placed on the educational and recreational aspect of folk and square dance.

HPER 1020 Softball (1). A course designed to teach the rules, strategies, fundamentals and other aspects of the game of softball.

HPER 1021 Tennis (1). A course designed to teach students the basic skills, rules, strategies, court safety and etiquette as it applies to the game of tennis.

HPER 1022 Social Dance (1). An elective course exploring the different types of social dance from an educational, recreational and sociological standpoint that can serve as a carry-over of values for all ages.

HPER 1023 Touch Football (1). An elective course that presents the modified form of football. Emphasis is on fundamental skills necessary for participation.

HPER 1030 Weight Training (1). A course designed to teach the rudiments of movement using progressive resistance training. Emphasis is on improving muscle tone, muscular endurance, and muscular strength.
HPER 1031 Racquetball (1). A course designed to give instruction in the basic techniques and skills of racquetball. Conditioning drills for agility, stamina, hand-eye coordination essential to all sports will be incorporated.

HPER 1032 Beginning Yoga (1). A course designed for instruction in the basic knowledge and skills with emphasis on yoga postures.
HPER 1034 Archery (1). A course designed to provide the student with a knowledge of and a practice in the basic skills of archery. Emphasis will be placed on rules, safety and proper equipment.
HPER 1040 Track and Field (1). A course designed to introduce students to rules, regulations and basic techniques. Emphasis will be placed on various jumps, throwing events, stride techniques, relays, sprint and distance racing.
HPER 1041 Karate (1). An elective course that studies the basic movements of Oriental Martial Arts. Emphasis on theory and practice of the mental and physical discipline related to the activity. It is taught as a sport and for self defense.

HPER 1042 Beginning Jazz and Tap Dance (1). A course designed to give the basic fundamental movements, steps and patterns of jazz and tap dance as well as to incorporate the style and the history. No prerequisite.

HPER 1043 Scuba Diving (1). A course designed to teach safety, theory, and practice of scuba diving.

HPER 1044 Intermediate Yoga (1). A course designed for students with a foundation in basic yoga body work. Instructor's approval is required.

HPER 1050, 1051, 1052, 1053 Adapted Physical Education (1, 1, 1, 1). Elective for those students who have conditions that require limited physical activity. NOTE: Students limited to taking 1 class per semester. Limited to students who have been certified as disabled by the Office of Disabled Student Services.

## Major and Core Courses

HPSS 1400 Foundations of Athletic Training (2). This course provides students with an orientation to professional and clinical aspects of athletic training. Students are introduced to the professional domains of athletic training, a team concept of healthcare, and required policies and procedures.

HPSS 1510 Health and Wellness (3). A course concerned with placing emphasis on health through a consideration of various conditions which affect health. It includes a comprehensive coverage of important trends on major health areas such as communicable diseases, drugs, nutrition, and those involving the psychological or adjustive processes and those of a psychological or biological nature. A requirement for students fulfilling the core in general education.

HPSS 2010 Fundamentals and Techniques of Team Sports (1). A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating units of instruction for team sports. This includes analyzing each sport skill involved in a team sport and developing a teaching method in which the learner can be taught the proper fundamental skills, practice using drills and practice sessions and then, successfully participate in a lead-up game (elementary or secondary) of various sports.

HPSS 2020 Theory of Aquatics (1). A course designed to develop knowledge in all aquatics disciplines (instructional \& competitive swimming, diving, water polo, etc.), proficiency in the mechanics, skills, strategies, and progressions of aquatics sports. Emphasis is on providing majors with elements of teaching techniques.
HPSS 2030 Fundamentals and Techniques of Individual Sports (1). A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating units of instruction for individual sports. This includes analyzing each skill involved individual sports and developing a teaching method in which the learner can be taught the proper fundamental skills, practice sessions and then, successfully participate in a lead-up game (elementary or secondary) of various sports.

HPSS 2040 Fundamentals and Techniques of Lifetime Sports (1). A course designed to teach prospective coaches and teachers how to implement a tactical approach for creating ;units of instruction for individual sports. This includes analyzing each skill involved in individual sports and developing a teaching method in which the learner can be taught the proper fundamental skills, practice using drills and practice sessions and then, successfully participate in a lead-game (elementary or secondary) of various sports.
HPSS 2060 First Aid and Cardio-Pulmonary Resuscitation (3). A course designed to teach students to recognize and care for breathing and cardiac emergencies in adults, infants and children; identify and care for life-threatening bleeding, sudden illness, shock, injuries to muscles, bones and joints and the characteristics of healthy lifestyles. CPR/AED and First Aid certification from the American Red Cross may be earned through successful completion of the course.
HPSS 2225 Survey of Dance Forms: Folk and Square (2). A course which deals with the history, some personalities associated with (past and present) fundamental techniques, and experiences related to folk and square dance.

HPSS 2226 Survey of Dance Forms: Modern (2). A course which deals with the study of the history, some personalities associated with (past and present), fundamental techniques and experiences related to modern dance.

HPSS 2227 Survey of Dance Forms: Jazz and Social Dance (2). A course which deals with the study and skill development in selected social dances. The effort is to understand and develop skill in the continuum of movements in the activity.
HPSS 2228 Survey of Dance Forms: Tap Dance (2). A course which deals with the development of basic skills and understanding of related historical elements associated with the dance.
HPSS 2270 Fundamental Rhythms and Music for Dance (2). A course which provides an understanding of music in its relationship to dance; offers an experience in creating music with rhythm instruments (standard and contrived) for dance accompaniment; surveys the area of fundamental movement patterns through participation in creative and exploratory experiences.

HPSS 2310 Anatomy and Physiology (3). A basic course in gross anatomy and physiology designed to provide instructions related to exercise science, health fitness and performance, through the study of the organizational structure and function of the human body, and how these factors affect and are affected, by both acute and chronic exercise. Laboratory experiences will also be provided to augment concepts to be covered.

HPSS 2320 Exercise Prescription and Assessment (3). This course is designed to introduce the student to theoretical and practical concepts of exercise assessment, exercise interpretation and exercise prescription. The student will develop appropriate techniques used to recommend exercise prescription for healthy and unhealthy clients.

HPSS 2330 Exercise Prescription and Assessment Laboratory (1). Application of exercise testing and prescription in an array of patient/client populations. Students will develop proficiency in using clinical exercise testing equipment and in exercise assessment, data interpretation and development of exercise prescriptions.

HPSS 2400 Prevention and Care of Athletic Injuries (3). Introduction to the basic concepts of prevention of athletic injuries, injury recognition, and treatment necessary for the management of athletic injuries.

HPSS 2410 Athletic Training Clinical I (1). This course covers basic athletic training skills, techniques, and protocols appropriate for entry level student athletic trainers Emergency skills, documentation, and rehabilitation techniques will be covered. This course must be taken concurrently with HPER 2400.

HPSS 2420 Athletic Training Clinical II (1). This course covers basic athletic training skills, techniques, and protocols appropriate for entry level student athletic trainers. Preventive taping techniques and evaluation of basic injuries will be covered.

HPSS 2704 Pedagogy and Observation (1). Designed to foster the development of teacher candidate pedagogical skills in a variety of content settings. Emphasis will be on the implementation of lesson plans and skill progression assessments of children. Field experiences in selected elementary, middle or secondary schools will be incorporated. Co-requisites: PE 2010, 2030, or 2040.

HPSS 3000 Foundations of Health Education (3.0). The purpose of this course is to examine the philosophical, ethical and theoretical foundations of the professional practice of health education in school, community, work site and hospital settings, as well as in health promotion consultant activities. Students will be expected to develop their own philosophical, ethical and theoretical approach(s) to the field after becoming familiar with the literature related to the discipline. This course also requires a minimum of one hour each week (total of 15 hours a semester) of an active service-learning experience.

HPSS 3020 Movement Exploration (2). A course designed to teach application of theoretical and practical experiences in the problemsolving method of teaching motor activities. The course includes study and analysis of implications of the exploratory method for teachers at preschool, primary, and intermediate levels of instruction.

HPSS 3030 Consumer and Community Health (3). The purpose of this course is to provide future health educators with the tools to identify, question or seek accuracy in the delivery of health care, health services and health products. In addition, evaluation of health products, insurance, and services will be emphasized. This course will examine the role of government and the influence of the media on these issues. Community health structures (local health departments, state, CDC and other appropriate agencies) will be studied.

HPSS 3040 Elements of Safety (2). A course designed to foster a safe environment through awareness of hazards, accidents and emergencies and through the concepts of prevention, intervention, and maintenance of your surroundings.

HPSS 3050 Family Health and Sexuality (3). A course designed to examine current trends and attitudes toward human sexuality behavior with an emphasis on sexuality throughout the life cycle, interpersonal relationships, roles, interrelationships and family member roles and responsibilities.

HPSS 3060 Nutrition for Health, Fitness \& Sport (3). This course provides a thorough introduction to the fundamental principles of human nutrition and their application in health, fitness, athletics, wellness and lifestyle diseases.
HPSS 3070 Health Instruction for the School (3). A course designed to familiarize the students with the basic principles and concepts of constructing unit and lesson plans in health education, and utilizing materials and aids in grades K-12 from the conceptual approach to curriculum design. [Current state standards and programs will emphasized.]
HPSS 3080 Officiating Techniques (2). A course designed to teach the techniques of officiating for selected sports; and to provide practical experiences through officiating in selected activities.

HPSS 3100 Concepts of Games and Play (3). A course designed to offer the major theory and practice in exploratory experiences, lead-up activities, low organized games (for classroom, gymnasium, out-of doors), drills, and self-testing activities primarily for use in elementary physical education programs. . [The importance of integrating physical activity into the classroom will be emphasized.] A study of factors that make up desirable elementary physical education programs will be included. Suggestions as to how these activities may be adapted to use at secondary levels and in recreational situations will be discussed. Prerequisite: Admission to Teacher Education Program.
HPSS 3130 Kinesiology (3). A course designed to study muscles and their role in the science of human motion. This course is based on anatomical and mechanical principles with emphasis on the analysis of human movements in games, sports, other physical education skills, and basic movement activities. Laboratory experiences will also be provided to augment kinesiological concepts covered. Prerequisites: 2310.
HPSS 3140 Physiology of Exercise (3). A course designed to combine several science disciplines, neuromuscular activities, circulation and respiratory, metabolism, environmental aspects of exercise, fatigue and training, health and physical fitness. The course will describe and explain the functional responses and adaptations that accompany single and repeated bouts of physical exercise. Laboratory experiences will also be provided to augment concepts covered. Prerequisites: HPSS 2310 or BIOL 221 and 222.

HPSS 3180 Health Fitness Assessment and Program Design (3). A course designed to introduce the latest exercise programs: Pilates, Yoga, Water Aerobics, and Aerobic Exercises. This course will focus
on functional assessment tools, exercise prescription, and the role of physical fitness in achieving levels of health and fitness for all ages. It includes laboratory work to help develop effective group and individual client programs.
HPSS 3190 Adult Fitness (2). A course designed to introduce concepts about health-related physical fitness and to establish, through contemporary research evidence, the connections between physical fitness and wellness; lifestyle choices and behaviors. Wellness is a global concept that emphasizes self-responsibility for achieving an optimal state of health and well-being. This course will focus upon the role of physical fitness in a wellness lifestyle for all age levels.
HPSS 3200 Sport Psychology (3). Examines fundamental theories of psychology applied to sports organization, management, participation and influence of the major players in sports: organizers, administrators, coaches, athletes, family and spectators. It emphasizes theories of learning and principles of behavioral change, the effects of motivation, personality, attitudes, competition and group dynamics on sport performance, as well as the psychological effects of exercise, exercise adherence, and addiction as it relates to human performance.
HPSS 3230 Modern Dance: Techniques and Composition (2). A course which includes intermediate to advanced modern dance techniques and an introduction to the choreography process. Elective for majors and non-majors with previous experience in modern dance. Prerequisites: HPER 1012 or, HPSS 2225-2227.

HPSS 3240 Tap Dance: Technique and Choreography (2). A course which includes intermediate and advanced experiences. Elective for majors and non-majors with previous experience in tap dance. Prerequisites: HPER 1042 or, HPSS 2228.

HPSS 3260 Rhythmic Performance Groups (2). A course designed to give the student advanced techniques in ballet as well as prepare them for theory and training related to performance groups; Prerequisites: HPER 1012, or HPER 1042, or HPER 2225-7.

HPSS 3265 Rhythmic Performance Group (2). A course designed to give the student advanced techniques in modern dance as well as prepare them for theory and training related to performance groups. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.
HPSS 3266 Rhythmic Performance group (2). A course designed to give the student advanced techniques in jazz dance as well as prepare them for theory and training related to performance groups. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.

HPSS 3267 Rhythmic Performance Group (2). A course designed to give the student advanced techniques in tap as well as prepare them for theory and training related to dance performance groups. Prerequisites: HPER 1012, or HPER 1042, or HPER 2225.

HPSS 3300 Advanced Weight Training (3). A course designed to introduce knowledge, skills, and abilities required to increase muscle endurance, muscle strength, and muscle definition. Prerequisites: HPER 1030 or approval of instructor.

HPSS 3310 Measurement and Evaluation in Physical Education (3). A course which acquaints students with knowledge, skills, and abilities required to administer fitness assessments, as well as standard testing procedures available in physical education, exercise science, sports, and dance.

HPSS 3320 Life Guarding and Advanced Swimming (3). A course designed to review, develop, and coordinate different swimming strokes, water safety skills, and techniques in aquatics. CPR/AED, First Aid, and Life Guarding certification from the American Red Cross may be earned through successful completion of the course. Prerequisite: HPER 1011 or with instructor's permission.

HPSS 3330 Principles of Resistance Training (3). A course designed to introduce the correct teaching and safety techniques, as well as strategies for developing muscular strength, muscular endurance, muscular power, and muscle mass with resistance loads of machines, free weights, and universal gym. Laboratory exercises require application of theories to strength assessment, program design, periodization, and evaluation of training programs:
HPSS 3340 History and Philosophy of Physical Education (3). A basic survey of the history of physical education. It provides orientation in the essential unity of the educational process in the field of physical education, and it provides a foundation for philosophy, principles, curriculum, organization and administration methods and trends of modern physical education.

HPSS 3350 Lifespan Motor Development (2). A course structured to identify basic principles of physical education which serve as guidelines for action by prospective teachers in planning for teaching and in deciding what and how to teach.

HPSS 3410 Therapeutic Exercise (3). Rehabilitation skills of specific body parts will be covered. This will include utilization of rehabilitation tools and athlete/sport specific rehabilitation protocols.

HPSS 3420 Therapeutic Modalities (2). Specific therapeutic modalities and their use during rehabilitation will be examined. This will include gaining an understanding of the physics properties behind the use of modalities and the laws governing their use.
HPSS 3450 Pharmacology (3). The study of drugs (prescription and non-prescription), pharmacological applications, including awareness of indications, contraindications, precautions, and drug interactions. This course will also include government regulations relevant to treatment of the physically active.

HPSS 3460 Lower Extremity Injury Assessment \& Clinical (3). This course covers the application of anatomy, pathomechanics, and athletic training injury evaluation techniques and principles of the lower body. The clinical portion will provide laboratory applications of athletic training injury evaluation techniques and principles of the lower body.

HPSS 3470 Upper Extremity Injury Assessment \& Clinical (3). This course covers the application of anatomy, pathomechanics, and athletic training injury evaluation techniques and principles of the upper body. The clinical portion provides laboratory applications of athletic training injury evaluation techniques and principles of the upper body.

HPSS 3480 Organization and Administration of Athletic Training \& Exercise Science (2). The administration of athletic training, fitness and wellness facilities and proper organizational techniques will be covered. Topics in include, but are not limited to, budgeting, facility management, legal issues, recordkeeping, insurance, and technology use in these settings.
HPSS 3530 Leadership Principles (3). A course designed to equip the student to manage and supervise sport and recreation programs. It provides the opportunity to apply program planning skills and leadership techniques in a selected sport and recreation agencies.

HPSS 3550 Principles of Sport Fitness (3). This course covers the scientific training principles that must be utilized to improve conditioning and performance. The theory and practice of training for basic fitness or for specific sports with views on how athletes train to improve sport participation and performance will be discussed. This course is designed for health professionals, physical education teachers, coaches, and other individuals who desire to know how to plan and manage effective fitness-training programs.

HPSS 3600 First Aid \& CPR - Instructor Training (3). Designed to prepare the student to become an Instructor of American Red Cross courses in First Aid and CPR Prerequisites: HPSS 2060, and/or current American Red Cross First Aid and CPR certifications.

HPSS 3630 Outdoor Education (3). A course designed to develop practical outdoor skills through direct experiences including: cooking skills, camp site selection, hiking skills, compass reading, rock climbing, tenting, and aquatic skills.

HPSS 3710 Curriculum \& Methods in Physical Education (3). A course that utilizes principles and practices used to design instructions and experiences in program content. Exploration of teaching methods used to design developmentally appropriate content for students in K12 physical education programs. Focus will be on implementation of lifetime physical education concepts which utilize teaching with skill themes, movement concepts, fitness/wellness, and sport skills to inspire students to remain physically active as adults. Observations in elementary and secondary schools required. Prerequisite: Admission to Teacher Education.

HPSS 3720 Methods and Material of Health Education (3). A course designed to prepare prospective health educators to teach using an organized, sequential K-12 plan with information and skills theory need to become health-literate, to maintain and improve their health, to prevent disease, and to reduce risky health-related behaviors. Special emphasis will be placed on developing age appropriate lesson plans for health classes. Observations are required in elementary and secondary schools. Prerequisites: Admission to Teacher Education.
HPSS 3730 Clinical Classroom Experience (2). A course designed to provide a thorough survey of best practices in continuous performance-based assessment within the context of physical
education. Methods of performance-based assessment will be discussed, analyzed, and implemented into lesson plans. Students will gain experience in properly integrating effective assessment into curricula in a cohesive manner.

HPSS 3750 Sociological Implications of Sports (3). A course that deals with sociological perspectives of sports in society, theoretical bases for understanding how sports affect society and the worlds of sports. There will be some concern with issues related to gender, race, culture, politics, economics, and research in sports.
HPSS 4005 Current Issues (3). Covers a diverse selection of issues and complex problems that confront physical education and sport. Efforts will be made to encourage independence of thought and stimulate new insights. Emphasis will be placed on the preparation of PETE and HETE Teacher Candidate for the PRAXIS examination and editing student portfolios.

HPSS 4006 Current Issues (3). Covers a diverse selection of issues and complex problems that confront physical education and sport. Efforts will be made to encourage independence of thought and stimulate new insights.

HPSS 4007 Current Issues (3). Covers a diverse selection of issues and complex problems that confront exercise science, physical education, athletic trainers, and sport. Efforts will be made to encourage independence of thought and stimulate new insights. Emphasis will be placed on preparing Exercise Science and Athletic Training majors for the certification examination and editing student portfolios.
HPSS 4020 Mgmt., Org. of HPER \& Sport (3). A course which aims to provide instruction in organizational, administrative, supervisory, and leadership procedures utilized in HPER. Basic skills and techniques required to prepare students to administer programs in schools, parks, health agencies, intramurals, and athletics are emphasized.

HPSS 4030 Educating Students with Disabilities (3). A course designed to assist students in acquiring the necessary knowledge, skills and competencies to enable them to provide physical education programming for handicapped children in the least restrictive environment. Students are required to travel to off-campus sites for practicum experiences. Prerequisite: Admission to Teacher Education Program.

HPSS 4090 Drug Education (3). A course designed to present general and specific knowledge of the avoidance, use and abuse of substances. This course includes substance effects, dependence, habituation, addiction, abuse, classification of abused drugs, treatment of alcoholism and drug addiction.
HPSS 4150 Elements of School and Sport Law (3). Investigation and analysis of the law and legal issues in schools for physical educators, coaches, and fitness trainers; topics include negligence theory; common defenses; product liability; contract law, constitutional law, and sport litigation.

HPSS 4240 Coaching Court Sports (2). A course that provides an examination and study of the rules, methods of organizing practice, and management of teams; team offense and defense, strategy, and philosophy of coaching for court sports (e.g.: Basketball, Volleyball, Tennis).

HPSS 4250 Coaching Field Sports (2). A course that provides an examination and study of the rules, methods of organizing practice, and management of teams; team offense and defense, strategy, and philosophy of coaching (e.g.: Football, Soccer, Baseball \& Softball).
HPSS 4260 Coaching Individual Sports (2). A course that provides an examination and study of the rules, methods of organizing practice, and management of athletes; offense and defense, strategy, and philosophy of coaching (e.g., Aquatics, Track \& Field, Golf).

HPSS 4340 Planning Special Events and Demonstrations (2). A course that provides instructional planning for prospective teachers, physical fitness trainers, aquatics directors, and other exercise program providers. Practical methods for planning, directing, and producing demonstrational and school events related to instructional programs in the school, or activity programs in institutions are emphasized.

HPSS 4360 Water Safety Instructor (3). A course designed to train instructor candidates to teach effectively the safety procedures, skills and knowledge of the American Red Cross courses in aquatics. Prerequisites: HPER 1011 and/or HPSS 2020 and/or competency.

HPSS 4505 Senior Project Writing (3). A course designed to instruct students in basic independent research skills. Students are to select an area of interest, select a method of investigation, gather and analyze data, and state conclusions based on the information obtained from the study in a written terminal project. It is required of all HPSS majors.

HPSS 4506 Senior Project Writing (3). A course designed for teacher candidates to fully develop their professional portfolio. Students are to select an academic area of interest, construct the requisite curriculum, gather and integrate support materials, and state learning goals and objectives based on the curriculum developed. This will be a cumulative project presented in a written and oral form to the faculty. It is required of all Physical Education and Health Education-Teacher Education majors.
HPSS 4720 Enhanced Student Teaching (K-12) (9). A course designed to provide supervised student teaching in physical education in an elementary and secondary school placement. Emphasis is on the design of units, lesson plans, assessments, and teaching techniques designed in concert with an experienced teacher who will mentor and assist as student's work in the classroom.

HPSS 4730 Field Experience (3-9). This is a supervised field experience in one or more of the following professional settings: physical fitness leadership, administration, sports management, health promotion, and recreation. The internship required 150 hours per semester at 10 hours each week.

# Division of Nursing 

Kathy L. Martin, Ph.D., RN, CNE Executive Director and Associate Dean Frederick S. Humphries Family and Consumer Sciences and Nursing Education Complex (615) 963-5251

## General Statement

The Division of Nursing contributes to the health and welfare of the citizens of Tennessee by preparing registered nurses who have the knowledge and skill to provide quality nursing care in many different settings. The Division of Nursing offers two undergraduate nursing degrees, an associate of applied science degree (two year program) and a baccalaureate degree (four year program). Both programs are approved by the Tennessee Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN). The ACEN may be contacted at 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326 phone 404-

975-5000, www.acenursing.org. The Tennessee State Board of Nursing may be contacted at 665 Mainstream Drive, $2^{\text {nd }}$ floor, Nashville, TN 37243, 615-532-5166. Graduates of both programs are eligible to apply to take the NCLEX-RN licensure examination.

## Division of Nursing Mission Statement:

The mission of the Division of Nursing is to prepare nurses at the generalist, specialist, and advanced practice levels who provide safe, culturally sensitive, evidence-based, compassionate care to diverse populations in multiple settings. This mission is accomplished through the preparation of nurses to serve as clinicians, leaders, educators, and advocates, with a commitment to service and lifelong learning.

## Legal Requirements of State Boards of Nursing:

Eligibility for licensure for graduates who have been convicted of a violation of the law will be determined by a State Board of Nursing on an individual basis.

## Criminal Background Check and Screening for Substance Use:

A specified drug screen and a designated criminal background check including both the state and federal level is a requirement for student placement within clinical agencies. Based on the results of these checks/screenings, an affiliated clinical agency or site may determine not to allow a student's presence at their facility. This could result in the student's inability to successfully complete the requirements of the nursing program. Additionally, a criminal background may preclude licensure or employment. Students are required to cooperate fully with the process and to pay all associated costs. Tennessee State University and the Division of Nursing are not liable if the results of a criminal background check or drug screening indicates that a student is unable to complete the requirements of the program or if such results preclude an individual from obtaining licensure or employment.

## Special Fees and Expenses:

Students in the nursing programs are required to pay clinical fees and to pay expenses for required equipment, uniforms, criminal background checks, drug screens, specified learning resources and standardized examinations. Students are required to pass a physical examination and to submit proof of immunizations and titers, purchase student liability and health insurance, and provide their own transportation to and from assigned clinical sites. Clinical agencies may require students to undergo fingerprinting, drug screening, and have criminal background clearance, each of which are the financial responsibility of the student.

## Requirements for Graduation:

Students are eligible for graduation upon completion of all the University and Division of Nursing program requirements. All nursing students must earn a passing score on the comprehensive program examination before graduation. A minimum of 60 credit hours is required for graduation from the AASN program and 120 credit hours from the BSN program.

## Transferring Between TSU Nursing Programs:

Students may not transfer from one TSU nursing program to another if they have failed (grade of D or F) a nursing course or are ineligible, for any reason, to continue in their current program.

## Core Performance Standards

Nursing is a practice discipline, with cognitive, sensory, affective, and psychomotor performance requirements. The following Core Performance Standards identify essential eligibility requirements for participation in the nursing program.

| ISSUE | STANDARD | EXAMPLES OF ACTIVITIES <br> (NOT ALL INCLUSIVE) |
| :--- | :--- | :--- | :--- |
| Critical Thinking Ability | Critical thinking ability sufficient for clinical <br> judgment. | Transfer knowledge from one situation to another. Process information, <br> evaluate outcomes, problem solve and prioritize. Use long and short-term <br> memory, identify cause-effect relationships. Plan activities for others. <br> Synthesize knowledge and skills. Sequence information. |
| Interpersonal Skills | Interpersonal skills sufficient to interact with <br> individuals, families and groups from a <br> variety of social, emotional, cultural, and <br> intellectual backgrounds. | Negotiate interpersonal conflict. Respect cultural diversity in clients. Establish <br> rapport with clients and co-workers. |
| Communication Ability | Communication abilities sufficient for <br> interaction with others in verbal and written <br> form in English. | Explain health conditions, diagnostic and treatment procedures and initiate <br> health teaching. Interpret and document client responses to health status. <br> Convey information through written and oral reports. Organize work and |
| perform multiple tasks within given time constraints and under stressful |  |  |
| conditions while maintaining the ability to communicate clearly. |  |  |

The performance standards are used to assist students in determining whether accommodations or modifications are necessary and provide an objective measure upon which informed decisions can be based about whether students can meet requirements.

If an otherwise qualified student believes that he or she cannot meet one or more of the standards without accommodation or modifications, the nursing program will determine, on an individual basis, whether or not the necessary modifications can be made reasonably. The following process will be used:

- Before admission to the nursing program, all students will have information regarding Core Performance Standards.
- After admission to the major, students will be given a copy of the Core Performance Standards.
- A student with disabilities who believes that he or she may need assistance in meeting the Core Performance Standards should contact Disabilities Services at Floyd Payne Campus Center room 117.


## Interruption of Participation within Nursing Courses due to Health Care Needs

The Division of Nursing requires each student who has been hospitalized (inpatient, outpatient, one day center, etc.) for any condition requiring treatment to provide a written notice of medical clearance for participation in classes, labs, or clinical in order to return.

# Associate of Applied Science in Nursing Degree 

Avon Williams Campus (615) 963-7101

## Windia Urquhart Wilbert, DNP, RN AASN Program Director

Faculty: J. Bechard, S. Boone, B, Brown, C. Campbell, K. Gretton (LPN-RN Coordinator), E. Knox, S. Levy, B. Paramore, A. Poynter, A. Wilk and E. Wiltcher.

General Statement: The Associate of Applied Science Degree in Nursing is designed to prepare nurses who can provide safe competent care: assess patient needs, develop a plan of care, implement the plan of care skillfully, and evaluate the effectiveness of the care given. Care is provided to clients throughout the life cycle with commonly occurring illnesses in a variety of settings.

## Student Learning Outcomes and Competencies:

1. Clinical decision-making that results in finding solutions, individualizing care and assuring the delivery of accurate safe care that has positive outcomes.
2. Understand the client and family's cultural diversity to create a caring environment of hope and trust, where client choices related to cultural values, beliefs, and lifestyle are respected.
3. Communication whether verbal, nonverbal, written or through information technology, that is effective and promotes positive outcomes.
4. Professionalism which adheres to standards of professional practice; is accountable for own actions and behaviors; and within legal, ethical and regulatory frameworks.
5. Providing nursing care to the patient and family that incorporates knowledge of expected growth and development, prevents and/or provides for early detection of health problems, and uses strategies to achieve optimal health.
6. Management of care by efficiently and effectively using
human, physical, financial, and technological resources to meet client needs and support organizational outcomes.

## Program Options

There are two options for completing the associate degree program:

1. The regular weekday program is offered on the main TSU campus, and at Volunteer State Community College.
2. The LPN-AAS/RN Career Mobility evening/weekend program is offered on the TSU Avon Williams campus.

## Admission, Progression, Retention Requirements

Students must be accepted into the University and be advised by the Division of Nursing faculty to assure students are completing the required courses for the AASN degree program.
Students can meet the prerequisite math requirement for the Division of Nursing by:

1. taking an ACT (Enhanced) examination, within the last 3 years, and having a composite and a mathematics score of 19 or greater,
2. or by successfully completing a college level algebra course from an accredited institution.

Students can meet the prerequisite Chemistry requirement for the AAS Nursing Program by:

Completing chemistry with a lab (1 year high school or 1 semester of college with grade of " C " or better).
All high school deficiencies and pre-requisite courses must be completed before being admitted to the AAS Nursing Program. Students are admitted on a space available basis.
Admission Requirements:

1. All pre-requisite course requirements completed.
2. High school graduate or a GED score of 50 or higher. Applicants with GED scores less than 50 must complete prescribed college level courses with a minimum GPA of 2.50 .
3. Overall GPA of 2.5 on high school or completed college work.
4. One year of high school or one semester of college Chemistry with lab, with a grade of " C " or better which must be completed by the specific program application deadline.
5. Verification of math competency at the college algebra level by university testing or completion of required courses.
6. Completion of the pre-admission nursing entrance examination with scores equal to or above those designated on the AASN program website. (http://www.tnstate.edunnterior.asp?mid=2958,ptid=1)
7. Anatomy/Physiology and Microbiology/Bacteriology courses must have been taken within the last 5 years of admission with a minimal grade of $C$.
8. The curriculum plan must be followed in the sequence listed in the catalog. General education required courses must be taken in the semester listed or may be completed before the required semester.

## Application Requirements

Applications are available on-line or by contacting the Associate of Applied Science in Nursing Degree program (http://www.tnstate.edu/interionasp?mid=2898,ptid=1).

Applicants will be conditionally accepted to the AASN Program until they are fully admitted to Tennessee State University.

Eligibility Considerations for Admission:
a. completed Division of Nursing application
b. copies of transcripts from all institutions
c. copy of current TSU transcript
d. copy of pre-admission nursing entrance examination report with designated scores

## Admission Selection

The Admissions Committee will consider students who have submitted ${ }_{\text {st }}$ completed application materials postmarked by March $1^{\text {st }}$. Applications received after March $1^{\text {st }}$ are considered on a space available basis. Students who are not admitted must reapply in order to be considered for the next academic year. Students who meet admission criteria are ranked for selection for the upcoming class. The order of selection for applications postmarked by March $1^{\text {st }}$ will be ranked according to:

1. Overall GPA on all college work or cumulative high school GPA if no college courses have been completed at the time of application.
2. Number of required general education courses completed.
3. Scores on the pre-admission nursing entrance examination.
4. If more than one applicant has identical ranking scores, these applicants will be randomly selected. Qualified applicants who are not initially accepted will be placed on a waiting list and will be added to the class if space becomes available up until the first day of class. All waiting lists expire the first day of class.

## Accepted Students

Students who are accepted are generally notified by May 15th. Students must return their acceptance form to the Division of Nursing AASN Program by the date listed in the admission notification letter to assure their space in the class. Students who do not return the acceptance form by the date listed in the letter will be removed from the admission list. Students must complete the required Division of Nursing orientation as stated in the admission notification letter.
Students admitted to the program on a space available basis are contingent on submission of required health forms by the designated due date. Students must have a health examination which indicates satisfactory health. Other requirements are: health insurance, Liability insurance [ $\$ 1,000,000 / \$ 6,000,000]$, immunizations, titers, tuberculosis screening must be up to date as required by health care agencies for clinical practice. Clinical agencies may require fingerprinting, ten panel drug screen, and criminal background clearance. Students must show evidence of current AHA Healthcare Provider BLS training. Students must present documentation of requirements in order to attend clinical nursing classes. Documentation of all of the required clinical materials must be submitted to the AASN Program office no later than July 1. Failure to meet the July 1 deadline will result in loss of admission to the program. All requirements must be updated annually while the student is in the Division of Nursing courses.

## Progression and Retention Requirements for AASN Program

1. A grade of $C$ or better in nursing courses and $S$ (satisfactory) in laboratory and clinical evaluation is considered passing.
2. A grade of $D, F$, or $U$ is considered failing. A student who earns a failing grade in a nursing course is not eligible to progress in the program or be admitted to the BSN program.

## Readmission Process

1. A student who earns a failing grade in a nursing course and wants to re-apply, must write to the Program Director for re-entry at least six weeks before the beginning of the semester re-entry is requested. An updated transcript is required. Re-
admission requests are reviewed by the Retention and Progression Committee, which makes recommendation to the program director. Readmission is in part based on available faculty and clinical resources. There is no guarantee that any student will be re-admitted.
2. A student who earns a second failing grade in any nursing course at TSU cannot continue in the program. This includes any newly enrolled course(s) or any nursing course being repeated a second time.

## Transfer of RN Nursing Courses:

Transfer students from other RN programs must meet the University and Division of Nursing requirements for admission and graduation. Students who have completed nursing courses with minimum grades of C in an NLNAC or CCNE accredited RN program may be eligible to receive transfer credit. Students must provide a current transcript, nursing course descriptions, evidence of satisfactory clinical performance, and a letter of good standing from their previous nursing school director BEFORE the course(s) are evaluated. Students who have earned a D, F, or WF in a nursing course at another school are not eligible for admission. Eligible transfer students are admitted on a space available basis.

Departmental Requirements for Associate of Applied Science in Nursing ( 60 Semester Hours)
MAJOR CORE: Thirty-six semester hours of nursing are
required; NURS 1200/1201, 1300, 1010/1014,1020/1024, 2010/ 2014, 2020/ 2024.

General Education Core: Twenty-four semester hours of University and General Education courses are required: ENGL 1010, BIOL 2210/2211, BIOL 2220/2221, BIOL 2400/2401, PSYC 2010 and PSYC 3510; Humanities Elective.(must be Music Appreciation, Art Appreciation, or Intro to Theatre)

Suggested Two Year Plan: Total 60 credit hours

## FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| NURS 1010/1014 | 6 | NURS 1020/1024 | 8 |
| BIOL 2210/2211 | 4 | BIOL 2220/2221 | 4 |
| ENGL 1010 | 3 | PSYC 2010 | 3 |
| NURS 1200 | 2 | NURS 1300 | 2 |
|  |  |  | 17 |

## SOPHOMORE YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| NURS 2010/2014 | 9 | NURS 2020/2024 | 9 |
| PSYC 3510 | 3 | Humanities Elec. | 3 |
| BIOL 2400/2400L | 4 |  |  |
|  | 16 |  | 12 |

LPN-AASN/RN Career Mobility Program:
The Career Mobility Program is designed to meet the needs of LPN's advancing their careers and recognize LPN's previous learning and current clinical experience.

Eligibility considerations for Admission Requirements for Licensed Practical Nurses (AASN Program):

1. All remedial and developmental requirements completed.
2. High school graduate or a GED score of 50 or higher. Applicants with GED scores less than 50 must complete prescribed college level courses with a minimum GPA of 2.50 .
3. Cumulative GPA of 2.5 on completed college work.
4. One year of high school or one semester of College Chemistry with lab with a grade of " C " or better must be
completed by application or deadline (March 1st) for summer admission.
5. Verification of math competency at the college algebra level by university testing or completion of required courses.
6. Completion of the pre-admission nursing entrance examination with scores equal to or above those designated on the program website (http://www.tnstate.edunnterior.asp9mid=19058,ptid=1).
7. Completion of required departmental and general education courses with a grade of "C" or better.

| English Composition | 3 |
| :--- | :--- |
| Microbiology/Bacteriology | 8 |
| Introduction to Psychology | 3 |
| Humanities | 3 |
| Developmental Psychology | 3 |

8. Proof of current unencumbered Tennessee LPN license
9. Currently working as a LPN a minimum of one year or LPN program completion within the last six months and currently employed as a LPN.

## Application Requirements:

Each applicant must be fully admitted to Tennessee State University prior to being considered eligible to apply for admission to the Associate of Applied Science in Nursing Degree Program. Applications are available in the Associate of Applied Science in Nursing Degree Program Office on the Avon Williams Campus
(http://www.tnstate.eduAnterior.asp?mid=289\&ptid=1).
Students who meet admission requirements must complete the following application materials to be postmarked no later than March $1^{\text {st }}$ for the summer entry class.

1. Completed application to Division of Nursing.
2. Copies of transcripts from all institutions attended
3. Copy of current course enrollment.
4. ACT (enhanced), SAT or Compass placement examination score.
5. Pre-admission nursing entrance examination report with designated scores.
6. Copy of current Tennessee LPN license.
7. Letter verifying current employment from the Director of Human Resources. Letter must be on company letterhead.
8. Letters of reference from immediate supervisor on company letterhead.
9. Applicant letter of intent.

Note: The student must submit a postage paid selfaddressed postcard that will be sent back to the student as a receipt of the application.

## Admission Selection:

The Admissions Committee will consider students who have submitted completed application materials postmarked by March 1st, for summer admission. Applications received after March $1^{\text {st }}$ are considered on a space available basis. Students who are not admitted must reapply to be considered for the next admission period.
Students who meet admission criteria are ranked for selection for the upcoming class. The order of selection for applications received by March $1^{\text {st }}$ will be ranked by:

1. Cumulative GPA on all college work or cumulative high school GPA if no college courses have been completed at the time of application.
2. Number of general education courses completed.
3. Scores on the pre-admission nursing entrance examination.
4. If more than one applicant has identical ranking scores, applicants will be randomly selected.

Qualified applicants who are not initially accepted will be
placed on a waiting list and will be added to the class if space becomes available up until the first day of class. All waiting lists expire the first day of class

## Accepted Students

Students who are accepted are generally notified by May 15th for summer admission. Students must return their acceptance form by the date listed in the letter to assure their space in the class. Students who do not return the acceptance form by the date listed in the letter will be removed from the admission list. Students must complete the required Division of Nursing orientation.
Students admitted to the program on a space available basis and contingent on submission of required health forms by the designated due date. Students must have a health examination which indicates satisfactory health. Other requirements are: health insurance, Liability insurance [\$1,000,000/\$6,000,000], immunizations, titers, tuberculosis screening must be up to date as required by health care agencies for clinical practice. Clinical agencies may require fingerprinting, ten panel drug screen, and criminal background clearance. Students must show evidence of current AHA Healthcare Provider BLS training. Students must present documentation of requirements in order to attend clinical nursing classes. Documentation of all of the required clinical materials must be submitted to the AASN Program office no later than July 1. Failure to meet the July 1 deadline will result in loss of admission to the program. All requirements must be updated annually while the student is in the Division of Nursing courses.

Progression Requirements of Licensed Practical Nurses
Students are admitted to the LPN-RN Career Mobility
Program once a year in the summer.
SUMMER SESSION HR.
NURS 1007 (LPN Transition) 6
NURS 1300 (Health Assess) 2
NURS 1200 (Pharmacology) 2

LPN'S who successfully pass the NURS 1020 challenge exam will have the following progression. (NURS 1020 will be noted on the transcript prior to taking a clinical course).

| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| :--- | :---: | :---: | :---: |
| NURS 2010/2014 | 9 | NURS 2020/2024 | 9 |
| NURS 1010 (waived)   <br> (6 hrs.)   <br>    |  |  |  |

LPN's who are NOT successful on the NURS 1020 challenge will have the following progression.

| YEAR I - SEMESTER II |  | YEAR II - SEMESTER I |  |
| :--- | :---: | :---: | :---: |
| SPRING SEMESTER | HR. | FALL SEMESTER | HR. |
| NURS 1020/1024 | $\frac{8}{8}$ | NURS 2010/2014 | $\frac{9}{9}$ |
|  |  |  |  |
| SPRING SEMESTER | HR |  |  |
| NURS 2020/2024 | 9 |  |  |
| Total | 9 |  |  |

## Course Descriptions

Nursing (NURS)
NURS 1007 LPN Transition (6) D2L. Introduction to role transition for the Licensed Practical Nurse (LPN) and the basic concepts of nursing trends and professional role development. The focus is on concepts of the nursing process, critical thinking, awareness of cultural diversity, communication, professionalism, human growth and development, and decision-making. Nursing management of commonly occurring health problems are explored, as well as coping strategies that are
appropriate for clients and families. Five class hours each week. (Pre-requisites: Admission to the Program, ENGL 1010, BIOL 2210/2211, BIOL 2220/2221, BIOL 2400/2401, PSYC 2010, PSYC3510, NURS 1200, NURS 1300 and Humanities Elective).

NURS 1010/1014 Fundamentals of Nursing (6). Introduction to the basic concepts of the nursing profession. Decision making, critical thinking, awareness of cultural diversity, communication, professionalism, human growth and development and the role of the nurse as provider of health care are integrated throughout the course. Clinical activities are designed to help students assess and diagnose basic clinical needs and assist in meeting those needs in adults experiencing commonly occurring health problems. Four class and six clinical hours each week. (Pre-requisite: Admission to the Program, Co-requisites: BIOL 2210/2211, ENG 1010, NURS 1200).

NURS 1200 Fundamentals of Health Assessment (2). Introduces the student to basic physical and health assessment techniques. Focus is on adult clients with emphasis on expected findings and appropriate modifications for different age and cultural groups. Selected unexpected findings are discussed. Nursing assessment skills as a part of the role of the professional nurse are introduced. Course expands on the assessment and clinical skills learned and the nursing role of provider of care to the client with health needs. Emphasis is on utilizing critical judgment and communication to promote optimal health among adults experiencing or recovering from illness. One hour of class and two laboratory hours each week. ((Prerequisite: Admission to the Program),Co-requisites: NURS 1010/1014, BIOL 2210/2211, ENGL 1010).

NURS 1300 Pharmacology of Drug Therapy (2). Introduces student to basic pharmacology which pervades all phases of nursing practice and relates directly to patient care and patient education. Course introduces student to major classifications of medications with their concurrent mechanisms of actions, side effects, client education and nursing implications. Pharmacotherapy for clients throughout the lifespan is included. Course also includes basic dosage and solution calculations that are utilized by the provider of nursing care. Two class hours each week. (Prerequisites: Admission to the Program, NURS 1010/1014, NURS 1200; Co-requisites: NURS 1020/1024, BIOL 2220/2221, PSYC 2010).

NURS 1020/1024 Adult Health Nursing 1(8). The study of nursing care required to assist the individual and family in coping with commonly occurring health problems. The nursing process (assessing, planning, intervening, and evaluating) is emphasized. Decision making, cultural diversity, communication, growth and development, professionalism, and management of care are integrated throughout the course. Six class and six clinical hours each week. (Pre-requisites: NURS 1010/1014, NURS 1200; Co-requisites: BIOL 2220/2221 and PSYC 2010).

NURS 2010/2014 Family and Behavioral Health (9). Using the nursing process, the student learns to assume increasing responsibility for judgment in patient situations requiring understanding of concepts and principles of women's health, child health, and behavioral health nursing. Clinical activities include experiences in acute care as well as community settings. Five class and twelve clinical hours each week. (Prerequisites: NURS 1010/1014, NURS 1200, NURS 1020/1024, NURS 1300; Co-requisites: BIOL 2400/2401, PSYC 3510).

NURS 2020/2024 Adult Health Nursing II and Management Concepts (9). Complex Nursing is the capstone course of the program. The course content synthesizes knowledge and skills learned in previous courses. Theory includes multi-system stressors such as AIDS, heart failure, complications of diabetes, burns, renal failure, bioterrorism and emergency preparedness. Clinical experiences include rotations to specialty areas and participation in the political process as it relates to nursing. During the last four weeks of the course, clinical rotations with a preceptor provide experience in added responsibility with multiple clients, delegation and management of care. Five class and twelve clinical hours each week. (Pre-requisites: NURS 1010/1014, 1020/1024 and 2010/20143; Co-requisites: Humanities Elective).

## Baccalaureate Nursing Degree Program

Pamela D. Ark, Ph.D., RN, BSN Program Director
Frederick S. Humphries
Family and Consumer Sciences and Nursing Education Complex
(615) 963-5273

Faculty: P. Ark, R. Bone, S. Farmerie, L. Gibson, J. Harris, D. Hood, P. Jordan, C. Hines, P. Noble-Britton, S. Parker, D. Wilson, and M. Zsamboky.

## BSN Program Outcomes

The BSN Program will:

1. Facilitate successful completion by the student enrolled in the BSN program of study.
2. Achieve competencies appropriate to role preparation as the baccalaureate-prepared nurse generalist.
3. Prepare graduates for successful completion on the registered nurse licensure examination.
4. Prepare graduates for successful job placement following graduation and licensure.
5. Achieve alumni satisfaction in that the BSN Program prepared the graduate for the role of the baccalaureate prepared registered nurse.
6. Achieve employer satisfaction with graduate preparations for entry-level registered nurse positions.

Student Learning Outcomes: Upon completion of the Bachelor of Science Degree in Nursing, the graduate will be able to:

1. Demonstrate the provision of holistic, ethical, and culturally sensitive care for persons across the life span.
2. Use professional standards of practice and the nursing process as a framework for making clinical decisions to deliver safe and effective nursing care for the health promotion, maintenance and restoration of individuals, families, and communities.
3. Apply research findings in the provision of evidenced based nursing care.
4. Demonstrate leadership through participation in professional and community-based collaborative projects.
5. Provide client education at the individual, family and community levels that empowers the client to make appropriate lifestyle changes.
6. Model professional identification, commitment and accountability through involvement with professional organizations.

## Admission, Progression, and Retention Requirements:

Students must be accepted into the University and meet with the Division of Nursing faculty each semester to assure completion of the required general education and nursing prerequisite courses in the first two years of college coursework (lower division).

Eligibility for Consideration of BSN Nursing Major Admission Requirements:

1. Each applicant must be fully admitted to Tennessee State University prior to being considered eligible to be accepted for admission to the Bachelor of Science in Nursing Degree Program.
2. An overall GPA of at least 2.8 on a 4.0 scale at the end of the semester prior to submission of application to the BSN Program.
3. Completion of 61 hours of lower division required University and General Education and nursing prerequisite courses before entering upper division nursing courses. Only two courses can remain to be taken during TSU Summer I term. Without exception, all general education and nursing prerequisite courses must be completed by the end of the Summer I semester, prior to entering the upper division nursing courses in the subsequent fall semester.
4. A grade of $C$ or higher is required in each course in the general education and pre-nursing. All required courses, with grades of $D$ must be repeated before
review for admission.
5. Completion of the required basic science courses with a grade of $C$ or above.
6. Students with 2 or more failing science grades (D or F) are not eligible for admission regardless of retaking the courses.
7. Pre-admission nursing entrance examination with scores equal to or above the values designated on the TSU Division of Nursing website.
8. Entering the BSN applicant pool does not guarantee admission to the BSN Program.
9. The BSN application is for the designated admission date; a new application must be submitted in the subsequent year should the applicant not be admitted to the program.

## Admission Process for the Nursing Major:

Students who meet the eligibility for consideration of admission requirements for the nursing major need to complete a Division of Nursing BSN application with copies of the following information attached:

1. Student unofficial copies of all college transcripts, current TSU transcript and nursing entrance examination scores.
2. The Admissions Committee will only consider students who have submitted completed application materials for the Fall semester postmarked by March $1^{\text {st }}$. If March $1^{\text {st }}$ is on a Saturday or Sunday, the application deadline is the Friday prior to the weekend day. The student may submit a postage paid self-addressed postcard that will be sent back to the student as a receipt of the application.
3. Students are admitted to the program on a space available basis and contingent on submission of required health forms by the designated due date.
4. Students who are admitted must have a health examination which indicates satisfactory health, the required immunizations, titers, and tuberculosis screening before starting the nursing major. Immunizations, titers, and tuberculosis screening must be up to date as required by health care agencies for clinical practice. All required documentation must be submitted to the BSN Program Office no later than July 1. Failure to submit the required materials by July $1^{\text {st }}$ will result in loss of admission. All requirements must be updated annually while the student is in upper division nursing courses.
5. Students must show evidence of current American Heart Association Health Care Provider BLS Status certification, a national criminal background report, 10 panel urine drug screen, fingerprinting (if required by the clinical agency), and student nurse liability insurance of $\$ 1,000,000 / \$ 6,000,000$, and basic health insurance prior to admission to classes in the nursing major (i.e. lecture, learning resources laboratory, and clinical). Note: The Division of Nursing will notify students of new requirements from clinical agencies in the admission letter to the student. Without exception, all required documentation must be submitted to the BSN Program Office no later than July 1. Failure to submit the required materials by July 1 will result in loss of admission. All requirements must be updated annually while the student is in upper division nursing courses.

## Criminal Background Check and Drug Screen

A drug screen and a designated criminal background check including both the state and federal level may be a requirement for student placement within clinical agencies. Based on the results of these checks, an affiliated clinical agency may determine to not allow a student's presence at their facility. This could result in your inability to successfully complete the requirements of the nursing program. Additionally, a criminal background may preclude licensure or employment. Check
with your Board of Nursing for specific requirements.

## Progression and Retention Requirements

1. A grade of $C$ or better in lecture and $S$ (satisfactory) in laboratory and clinical evaluation is passing.
2. A grade of $D$ or $F$ is failing. A student who earns a failing grade in a BSN nursing course is not eligible to progress in the BSN program and cannot transfer to the AASN program at Tennessee State University.
3. All general education courses must be completed by the end of the first summer session prior to the fall semester admission date before beginning junior level nursing courses.
4. Students who withdraw from a nursing course but continue in other nursing courses for that semester must meet with the Program Director to update their plan for progression.
5. All students must pass a medication and dosage calculation test prior to entering the clinical agency in the first semester. A medication and dosage calculation test must be passed at the start of each subsequent semester in order to enter the clinical agency. IF the student is not successful on the examination, the student earns an unsatisfactory grade in the designated course and cannot progress in the nursing program. The passing score is set by the BSN faculty. All students must successfully complete through demonstration and testing a skills competency performance examination at the end of junior year, fall term as well as at the beginning and end of spring term in the junior year and both fall and spring terms in the senior year. IF the student is not successful on the examination, the student earns an unsatisfactory grade in the designated course and cannot progress in the nursing program.
6. All students must earn a passing score on the Clinical Decision Making Comprehensive Exit Examination required by the Division of Nursing faculty before graduation. The passing score is set by the Division of Nursing.
Re-admission Requirements and Process:
Students who withdraw from the program may be reviewed, (one time only), by the BSN faculty to determine, on an individual basis, if they are eligible for re-admission to the program. The student may be readmitted on a space available basis. The student must submit a letter to the Program Director within 14 days from the withdrawal date requesting to be readmitted.
7. Students who apply for re-admission must meet the program admission requirements.
8. A student who withdraws from the program one time by the stated University withdrawal date will be eligible for readmission.
9. Once a student is re-admitted, the nursing courses must be completed in sequence. The student must progress to the next level of the program each semester.
10. A student who withdraws from the program a second time, for any reason, will not be re-admitted.
All lower division University requirements and required
courses must be completed with a cumulative GPA of 2.5 and a grade of C or higher in each course.

## RN-BSN Career Mobility Program Admission:

The Division of Nursing has a Career Mobility Program for RNs to earn a BSN degree. RN students are admitted through the same process as regular students. Admission is once a year in the summer, and the length of the program is one calendar year (3 semesters). English Composition I and II must be completed prior to admission. Statistics must be completed
prior to NURS 4220. RN-BSN students may enter the program with two remaining general education/pre-requisite courses. The last 30 hours towards the BSN must be taken at TSU.

## RN-BSN Admission Requirements

1. Officially admitted to Tennessee State University, apply online at www.tnstate.edu
2. A current unencumbered Tennessee license
3. An overall GPA of 2.5 on a 4.0 scale at the end of the semester prior to application submission.
4. Completion of 60 credit hours of lower division courses including general education courses
5. Proof of satisfactory health examination, current American Heart Association Healthcare Provider BLS training, immunizations, titers, tuberculosis screening, a national criminal background clearance, 10 panel urine drug screen and professional liability insurance of $\$ 1,000,000 / \$ 6,000,000$ (required for clinical practice), and basic health insurance. Any new requirements from clinical agencies will be listed in the admission letter to the student. All required documentation must be submitted to the BSN Program Office no later than the designated due date. Failure to submit the required materials by the designated due date will result in loss of admission.

A typical plan of study for the RN-BSN student is outlined below.

| SUMMER SESSION | COURSE TITLE | HR. |
| :--- | :--- | :---: |
| NURS 3320 | Professionalism (online) <br> Pharmacology(online) | 3 |
| NURS 3080 | 3 |  |
| NURS 3250/3251 | Health Assessment (online) <br> with lab face-to-face | 3 |
| Guided Elective | See semester schedules of <br> available courses | 3 |
| FALL SEMESTER | COURSE TITLE | HR. |
| NURS 4220 | Nursing Research <br> Community Health | 3 |
| SU360/4364 | Nursing |  |
| SPRING SEMESTER | COURSE TITLE |  |
| NURS 4330 | Nursing Leadership and <br> Management | HR. |
| NURS 3260 | Gerontological Nursing <br> Concepts | 3 |
| NURS 4500 |  <br> Health Care | 3 |

Upon successful completion of the first two semesters of the nursing major, credit for 30 hours of BSN courses will be noted on the RN-BSN TSU transcript. Upon admission to the RN-BSN program, students can have a total of two remaining general education/nursing pre-requisites courses.

Complete Credit Hours - 60-Hours of General Education and Nursing Pre-requisite courses
Completion of general education and nursing pre-requisite courses:

| COURSE TITLE | HR. |
| :--- | :---: |
| English Composition | 6 |
| English Sophomore Literature Course from |  |
| Catalog | 3 |
| Microbiology Course \& Lab | 4 |
| Anatomy and Physiology I \& II Course \& Lab | 8 |
| Introduction to Psychology | 3 |
| Introduction to Sociology | 3 |
| Developmental Psychology | 3 |
| College Algebra | 3 |


| Public Speaking | 3 |
| :--- | :--- |
| Psychology (Statistics) | 3 |
| Pathophysiology Course \& Lab | 4 |
| History per General Education Requirements | 6 |
| Introduction to Philosophy | 6 |
| Humanities Elective per General Education <br> Requirements | 3 |
| Electives | 6 |

Remaining general education and other lower division courses may be taken concurrently with nursing courses with a minimum grade of " C " for all courses.

## Application Requirements

1. Attend an advisement session with RN-BSN faculty coordinator, call: 615-963-5273.
2. Submit student copies of all transcripts to the advisement session.
3. Submit copy of current enrollment of courses:
a. Copy of all college transcripts
b. Current semester course enrollment
c. Copy of current RN License
d. Verification of current employment

Admissions Committee will review applications and applicants will be notified by the Program Director.
Notice: Advisement with RN-BSN faculty coordinator is required.
The Admissions Committee will consider students who submitted completed application materials postmarked by March $1^{\text {st }}$ for summer admission.

## Transfer of RN Nursing Courses

Transfer students from other four year schools must meet the University and Division of Nursing requirements for admission and graduation. Students must provide a current transcript, nursing course descriptions, evidence of satisfactory clinical performance, and a letter of good standing from their previous nursing school BEFORE the course(s) are evaluated. Students who have been dismissed from other Schools of nursing are not eligible for admission. Students who have earned a D, F, or WF, in a nursing course at another school are not eligible for admission.
The Admissions Committee will determine if transfer courses are equivalent to TSU nursing courses. Students may be required to demonstrate lab and/or practicum competencies. Courses that are equivalent to required courses will be accepted if the student earned a minimum grade of $C$ in the course(s) and have the required lab/practicum competencies. Students must meet University residency degree requirements to complete degree requirements for graduation. Transfer students are accepted on a space available basis.
Department requirements for Bachelor of Science Degree in Nursing:

Major Core - Total Hours: 59 Semester Hours of Nursing are required.
NURS 3040/3041/3044, NURS 3080, NURS 3250/3251, NURS 3320, NURS 3100/3101/3104, NURS 3260, NURS 3340/3344, and NURS 4360/4364, NURS 4220, NURS 4380/4384, NURS 4140/4144, NURS 4330, NURS 4400, NURS 4540/4544

## General Education Core - Total Hours: 61 Semester Hours

University and general education courses are required; University Orientation, ENG 1010 and 1020 and sophomore literature course from catalog; COMM 2200, HIST 2010 and HIST 2020; BIOL 4272, 4273; BIOL 2210/BIOL 2211, BIOL 2220/BIOL 2221, BIOL 2400/BIOL 2401; MATH 1110; PHIL 1030; Humanities elective; SOCI 2010; PSYC 2010, PSYC 3510, PSYC 2180; Electives - 5 semester hours [two credits Freshman Introduction to Nursing I and three credits Sophomore Introduction to Nursing II)

## Bachelor of Science in Nursing Degree Suggested Four Year Plan Total 120-Hours

| FRESHMAN |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1110 | 3 | BIO 2220/2221 | 4 |
| BIO 2210/2211 | 4 | Humanities Elective | 3 |
| UNIV 1000 | 1 | COMM 2200 | 3 |
| PSYC 2010 | 3 | NURS 1000 - | 2 |
|  | 14 |  | 15 |
| SOPHOMORE |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR. |
| HIST 2010 | 3 | HIST 2020 | 3 |
| BIO 2400/2401 | 4 | BIO 4272/4273 | 4 |
| PHIL 1030 | 3 | SOCI 2010 | 3 |
| PSYC 2180 | 3 | PSYC 3510 | 3 |
| ENGL literature [see catalog choices] | 3 | Elective- Pre-nursing <br> Course II | 3 |
|  | 16 |  | 16 |
| JUNIOR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| NURS 3040/3041/ | 6 | NURS 3100/3101/ | 6 |
| 3044 |  | 3104 |  |
| NURS 3250/3251 | 3 | NURS 3340/3344 | 5 |
| NURS 3260 | 3 | NURS 3080 | 3 |
| NURS 3320 | 3 |  |  |
|  | 15 |  | 14 |
| SENIOR |  |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| NURS 4220 | 3 | NURS 4330 | 3 |
| NURS 4380/4384 | 6 | NURS 4400 | 2 |
| NURS 4140/4144 | 4/2 | NURS 4360/4364 | 6 |
|  |  | NURS 4540/4544 | 2/2 |
|  | 15 |  | 15 |

## Course Descriptions <br> Nursing (NURS)

UNIV 1000 Freshman Orientation (1). An integral part of the first year experience is the Freshman Orientation: Service to Leadership course. The course covers information to enhance student understanding of higher education, transitioning from high school to college, and addressing the development of important skills such as critical thinking, writing, test-taking, career exploration, and time management.

NURS 1000 (2). The course is an introduction to the basic knowledge, skills, and attitudes of the professional nurse. Course content includes, a prelude to medication dosage and calculations, medical terminology; the history and roles of professional nursing; principles of basic therapeutic communication, development of critical thinking skills, and nursing school survival tips. Two lecture hours. Prerequisite: none, Co-requisites, none.

NURS 3000 Special Topics (1-8). Student or faculty generated course. Scope of subject matter is determined by students/instructor with approval of the Program Director. (Formerly NURS 300)
NURS 3040/3041/3044 Introduction to Nursing Practice (6). The course focuses on the theoretical foundations of nursing and psychomotor skills development, application of the nursing process, interpersonal skills, professional standards of care, and critical thinking. Laboratory and clinical experiences will provide opportunities for application of nursing practice. Three lecture hours, two laboratory hours, and six clinical hours each week. (Pre-requisite: admission to BSN Program; Corequisites: NURS 3250/3251, NURS 3320)

NURS 3080 Pharmacology (3). This course focuses on knowledge required by nurses to safely administer and manage pharmacotherapeutic agents. The principles of pharmacology, pharmacokinetics of major drug classifications, potential adverse reactions and drug interactions will be presented as bases for nursing
decisions regarding pharmacotherapeutic interventions. Care of the client throughout the lifespan is emphasized. (Pre-requisite: NURS 3040/3041/3044; NURS 3260; NURS 3250/3251; Co-requisites: NURS 3100/3101/3104; NURS 3340/3344).

NURS 3100/310113104 Health Promotion, Maintenance, and Restoration 1(6). This course focuses on expanding the student's theoretical and clinical knowledge base. This includes substantive content regarding stressors to the respiratory, cardiovascular, renal, reproductive, endocrine, and gastrointestinal systems. The nursing process is used to provide culturally sensitive, holistic, evidenced-based care. Diagnostic studies and pharmacological agents commonly prescribed in conjunction with the management of selected stressors are included. A skills lab component is included with required mastery of advanced skills related to course content. A clinical component is also required and provides opportunities for the student to provide holistic care in acute care facilities. ( 6 hrs .) Three lecture, two laboratory (NURS 3101), and six clinical hours (NURS 3104) each week. (Formerly NURS 310). (Pre-requisites: NURS 3040/3041/3044. NURS 3250/3251, NURS 3320; Co-requisites: NURS 3340/3344 and NURS 3080).
NURS 3250/3251 Health Assessment (3). Basic physical and health assessment techniques are taught. The focus is on the adult client with emphasis on expected findings. Appropriate modifications for different age-groups and selected unexpected findings are discussed. Relevance and application of findings to client needs and clinical decision-making are presented. Two lecture and two laboratory hours (NURS 3251) each week. (Formerly NURS 325) (Pre-requisite: admission to BSN Program; Co-requisites: NURS 3040/3041/3044, NURS 3320).

NURS 3320 Professionalism in Nursing (3). This course introduces students to the essential role and principles for professional nursing practice which includes foundations of nursing practice, professionalism, professional socialization and health promotion in nursing. The development of the professional role is discussed with a focus on integration and collaboration with the interdisciplinary health care team. Three lecture hours each week. (Formerly NURS 332). (Pre-requisite: admission to BSN Program; Co-requisites: NURS 3040/3041/3044, NURS 3250, NURS 3260).
NURS 3260 Gerontological Nursing Concepts (3). Selected concepts related to psychosocial, cultural, legal, ethical, social policy, and research issues of the aging population and their families are explored. The role of the nurse in meeting the needs of this population is stressed. Three lecture hours each week. (Formerly NURS 326). (Prerequisite: admission to BSN Program; Co-requisites: NURS 3040/3041/3044; NURS 3320; NURS 3250/3251).

NURS 3340/3344 Mental Health Nursing (5). The focus of this course is on the application of the nursing process in the delivery of care to clients and families with commonly occurring psychiatric health problems. Emphasis is on the environmental factors and the application of developmental systems and stress theories as they relate to the care of clients across the lifespan. Three lecture hours and six clinical hours (NURS 3344) each week. (Formerly NURS 434). (Pre-requisites: NURS 3040/3041/3044, NURS 3250/3251 and NURS 3320-; Co-requisites: NURS 3100/3101/3104 and NURS 3080).
NURS 4140/4144 Health Promotion, Maintenance, and Restoration II (4/2). The course provides a theoretical basis and clinical experience for the practice of holistic nursing for adult patients with critical illness in acute care settings. Emphasis is on applying the nursing process in order to restore the client to the highest level of health possible for that individual. Content addressed in the course will include managing alterations related to neoplastic disease, and of the immunologic, hematologic, and neurologic systems. Critical care topics will cover specific and representative problems requiring heroic interventions to maintain life. Students will use evidenced-based practice to perform comprehensive assessments, plan and provide care, and to evaluate outcomes of nursing actions. Clinical experience is in acute care settings. Concepts of leadership, management, and research are integrated into clinical practice and uniquely applied to the critical care setting. Four lecture hours and six clinical (NURS 4144) each week. (Pre-requisites: 3000 level BSN courses).

NURS 4220 Nursing Research (3). This course is an introduction to the research process and the nurse's role in applying research to nursing practice and client care. Emphasis will be placed on critiquing published research studies and research utilization. Three lecture hours each week. (Pre-requisites: NURS 3040/3041/3044, NURS 3320, NURS 3080, NURS 3100/3101/3104, NURS 3260 and NURS 3340/3344.

NURS 4360/4364 Community Health Nursing (6). The course provides a theoretical and practical background for the practice of community health nursing. The course is based on the synthesis of nursing theory and the public health sciences. Emphasis is on health promotion,
health maintenance, and disease prevention among population groups. The course assists students to recognize and analyze the interrelationships between individuals, families, population groups, and communities in determining the health status of each. The impact of political, economic, social, environmental, and cultural concerns, on the health of populations, is examined. The course consists of three lecture and nine clinical hours (NURS 4364) each week. (Formerly NURS 436). (Pre-requisites: NURS 3040/3041/3044, NURS 3080, NURS 3320, NURS 3100/3101/3104, and NURS 3340/3344).
NURS 4380/4384 Maternal-Child Nursing (6). A family centered approach to maternal-child nursing, using the nursing process is presented. The focus is on the normal maternity client and clients with common health alterations from pre-conception through the post-partum period. Care and management the normal newborn, well children, and those with selected problems are explored. Three lecture and nine clinical hours (NURS 4384) each week. (Formerly NURS 328). (Prerequisites: NURS 3100/3101/3104, and NURS 3260; (Co-requisites: NURS 4220).

NURS 4330 Leadership and Management (3). This course provides an introduction to the dynamic process of leadership within a variety of health care settings and organizational structures in the context of professional nursing practice. The professional nurse's role, influence and contributions as leader, provider and manager of client care and member of the profession are explored. Three lecture hours each week. (Formerly NURS 332). (Pre-requisites: NURS 4220, NURS 4280/42844, NURS 4360/43647; Co requisites: NURS 4400).

NURS 4400 Integration of Concepts (2). This course focuses on preparing the student for the National Licensure Examination for Registered Nurses (NCLEX(r)-RN) by reinforcing, complementing and building upon knowledge previously acquired in the nursing curriculum. This course will also enhance the integration and synthesis of information presented in concurrent courses, Health Promotion, Maintenance, and Restoration of Adult Clients II and Leadership and Management. The nursing process and critical thinking skills will be used to review previously learned nursing concepts as well as concepts currently being presented in the concurrent courses. Two lecture hours each week. (Pre-requisites: NURS 4220, NURS 4380/4384; Co-requisites: NURS 4540 and NURS 4330).

NURS 4540/4544 Health Promotion, Maintenance, and Restoration III (2/2). The course provides a theoretical basis and clinical experience for the practice of holistic nursing for adult patients with illness in critical care settings. Emphasis is on applying the nursing process in order to restore the client to the highest level of health possible for that individual. Content addressed in the course will include managing alterations related to respiratory, cardiovascular, neurological, burns, emergency and trauma nursing care, and systemic critical care conditions. Students will use evidenced-based practice to perform comprehensive assessments, plan and provide care, and to evaluate outcomes of nursing actions. Clinical experience is in acute care settings. Two lecture hours each week and six clinical hours (NURS 4544) each week; students may rotate to twelve hour shifts during the semester. (Pre-requisites: junior level BSN courses and fall semester senior level BSN courses; Co-requisites: NURS 4330, NURS 4400 and NURS 4360/4364).

NURS 4500 Issues in Nursing \& Healthcare (3). This required course in the RN-BSN Completion Program focuses on issues impacting professional nursing practice and the health care delivery system nationally and internationally. Current issues are critically analyzed in relation to their influence on the nursing professions, nursing practice, and the healthcare delivery systems. Legal and ethical issues related to health care are emphasized. Three lecture hours. Pre-requisites: admission to RN-BSN Program: NURS 3320.

## The College of Liberal Arts

Gloria C. Johnson, Ph.D., Dean<br>112 Hubert Crouch Hall<br>Telephone 615-963-5971

## Mission Statement

The College of Liberal Arts offers academic programs designed to engage students in the study of human experience and human potential and to equip them for creatively, critically, and collaboratively shaping their lives, careers, and communities.

## Core Values

Integrative Learning: Liberal Arts programs recognize education as an inherently connected, cumulative, and student-centered experience in which learning occurs across courses and across disciplines.

Creativity: Liberal Arts programs value and nurture originality, imagination, discovery, the active creation and appreciation of beauty, and the unique voice of each student. Rather than providing "training", they seek to inspire students and draw inspiration from them.

Responsibility: Liberal Arts programs recognize the development of integrity, ethical thinking, and social and environmental awareness as essential goals of a college education.

Critical Thinking and Reasoned Judgment: Liberal Arts programs recognize discourse and the construction of knowledge as human activities requiring the questioning of assumptions, logical reasoning, analysis and synthesis, the appreciation of multiple perspectives, self-awareness, empathetic capacity, and civility.

Professional Competency: Liberal Arts programs value, model, and cultivate excellence in written and oral communication, task organization, collaboration, quantitative thinking, and literacy in information technology, equipping students with transferrable professional skills.

Student Service and Support: Liberal Arts programs recognize the quality of the individual student's educational experience as the primary measure of their effectiveness and are committed to the highest standards of service for both traditional and non-traditional students in curriculum design, course offering, instruction, learning assessment, co-curricular activities, and academic and career advisement.

## Accreditation

Individual academic programs in the College of Liberal Arts are accredited by the national, regional, and state agencies which accredit programs. The Art program is accredited by the National Association of Schools of Art and Design (NASAD), and the Music program is accredited by the National Association of Schools of Music (NASM). All teacher certification programs in the College are approved by the Tennessee Department of Education. In addition, the teacher certification program of the University is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

## Teacher Education

The College of Liberal Arts offers Teacher Certification curricula in the following endorsement areas: Art, Elementary Education (with concentrations in language arts and social studies, science and mathematics, and child development and learning), English, Government, History, and Music.

All students who seek certification in any of these programs must be formally admitted through the College of Education, usually in the sophomore year. Admission requires a 2.75 cumulative grade point average and a passing score on the Praxis Exams. For a complete list of admission and retention requirements in the Teacher Certification Program, see College of Education in the Catalog. Admission is a prerequisite for upper-level certification courses. Students interested in certification should consult the teacher certification advisor in the program of their choice.

## General Education Core Requirements

Students in Liberal Arts must satisfy all of the general education requirements. Individual departments may require that their students fulfill these requirements in particular ways, such as by specifying which courses may be used to satisfy the literature, social science, natural science, or humanities requirements. Students should consult the departments' requirements in their program descriptions in this section of the Catalog. In addition to the core education requirements for all students in the University, students in the College of Liberal Arts must take Service to Leadership (UNIV 1000) as part of their general education.

For students seeking teacher certification, the requirements for admission are those for the Teacher Education Program contained in the College of Education section.

The College wants to assist students toward completing degree requirements as quickly as possible. It recognizes that it can best achieve this goal by insuring that students proceed toward the degree in a logical fashion, so that they first remove all deficiencies that prevent them from taking collegelevel courses and then meet general education requirements and lower-level requirements in their major programs before embarking on their upper-division programs.

## Graduation Requirements

As well as satisfying the University requirements for graduation, all graduates of the College must earn at least a C in all courses which are used to satisfy the program requirements in the major (as opposed to the general education requirements and electives). Required courses in the major program in which less than a $C$ is earned must be repeated until the minimum grade is earned. As part of University requirements, all students must earn at least a C in Freshman English (ENGL 1010 and 1020).

All graduates of Tennessee Board of Regents institutions are required to take an examination or examinations in the academic year in which they graduate to measure the effectiveness of their core curriculum and their major program. At the present time, all graduating seniors are required to take the ETS Proficiency Profile examination. Students should register for this test through their departments in the academic year in which they graduate. The test is a graduation requirement, and failure to take it will delay a student's graduation. Foreign-born students whose first language is not English are exempt from the test, but they must present documentation to support their claim to exemption.

To minimize the likelihood that last-minute problems will delay students' graduation, they should thoroughly familiarize themselves with all departmental, College, and University degree requirements, and stay in frequent contact with their advisors. The College requires that students fill out an application for graduation with the Records Office and complete a Senior Standing Form with their advisors at least one semester before the semester of anticipated graduation in order to determine their remaining degree requirements. The deadline for filing this application is posted in departmental areas.

Students should look for notice of this deadline and must meet the deadline. They must also take the initiative for informing their department of their intent to graduate. At the time of applying for graduation, students must either have expunged all Incomplete grades from their record or submit a copy of a signed agreement with the instructor of any class in which an Incomplete is outstanding; this agreement must specify the date by which the Incomplete will be removed. If students do not graduate in the semester for which they apply, they must subsequently re-file for graduation.

## Minor in Intelligence Studies

The program is open to students throughout the University regardless of major. The minor in Intelligence Studies has a core component of business, economics, philosophy, and political science courses. Students also take elective courses from a menu of business, economics, geography, history, philosophy, and political science courses. The minor offers a multidisciplinary approach to Intelligence Studies. All courses in the minor reinforce the basic skills of reading for comprehension, logical and analytical reasoning, research, writing, and oral presentation, and critical thinking.

Students pursuing the minor in Intelligence Studies are encouraged to participate in internship opportunities and study abroad experiences. By taking a menu of courses from different disciplines students develop an understanding of business, cultural, economic, historical, geographical, and political concepts that are significant in Intelligence Studies.

Required Courses: 12 - Semester Hours

| ECON 2010 | Macroeconomics or POLI 2010 <br> American National Government | 3 |
| :--- | :--- | :--- |
| PHIL 2500 | Logic and Critical Thinking | 3 |
| POLI 2700 | Introduction to Intelligence Studies | 3 |
| BISI 3500 | Data Mining | 3 |

Students in Liberal Arts will take ECON 2010; students in the College of Business will take POLI 2010. Students who are not in the College of Liberal Arts or College of Business will be permitted to choose either course.

Elective Courses: 6 - Semester Hours
ECON 4600 Business Intelligence 3
FINA 4100 Multinational Finance 3
GEOG 3100 Cartography
GEOG 3200 GIS Applications to Intelligence Studies
GEOG 4650 Geospatial Issues in Environmental
Security
HIST 3050 History of Intelligence 3
POLI 4370 Politics of Arms Control 3
POLI 4700 U.S. National Security Policy 3

## Minor in International Affairs <br> Coordinator: Dr. John Miglietta <br> 211 Hubert Crouch Hall <br> Telephone: 615-963-5515

This program is open to students throughout the University regardless of major. The minor in International Affairs has a core component of Political Science, History, and Geography courses. In addition students are asked to specialize in a specific areas of emphasis. These are Area studies (African, Asian, European, Latin American, and Middle Eastern studies); International Security, Law, and Organization; International Development; Foreign Policy Analysis and Comparative Politics; and International Peace and Justice,

Cultural Studies. This minor offers a multidisciplinary approach to the study of international affairs. The International Affairs minor provides students with exposure to various disciplines (Africana Studies, Agriculture, Anthropology, Business, Communications, History, Geography, Philosophy and Religious Studies, Political Science, and Sociology). By taking a menu of courses students develop an understanding of cultural, economic, historical, geographical, and political aspects of the international system.

Course Requirements:
Required Courses Credit Hours 12
Emphasis Electives Credit Hours $\quad 9$
Total Hours

$$
21
$$

Required Courses:

POLI 3690 Theoretical Approaches to International Relations
One History Course from the following:

- HIST 3030 Europe, 1871-1945
- HIST 3040 Europe since 1945
- HIST 4520 Latin American History II
- HIST 4820 Asian Civilizations II
- HIST 4860 History of Africa II
- HIST 4890 Modern Africa, 1960-Present

One Geography Course from the following:

- GEOG 4700 Political Geography
- GEOG 4750 Economic Geography
- GEOG 4640 Environmental Geography
- GEOG 4440 Cultural Geography
- GEOG 4300 Social Geography

Summary of the Core in International Affairs:

1. POLI 2200: Provides an introduction to the various economic, political, and social issues in international affairs.
2. POLI 3690: Provides a multi-perspective approach to the theoretical philosophies of international affairs.
3. One upper-level History Course: Gives students exposure to a particular region of the world.
4. One upper-level Geography Course: This provides students with a broad global geographical understanding.

Total Credit Hours: 12
This core gives students a background in aspects of the politics, history, and geography of international affairs while also providing a theoretical and methodological foundation.

Summary of Areas of Emphasis: Students will take three electives ( 9 credit hours) from one of the areas below, drawn from the following menus. (All courses are 3 credits.)

1. Area Studies (African, Asian, European, Latin America, and Middle East)
2. International Security, Law, and Organizations
3. International Development
4. Foreign Policy Analysis/Comparative Politics
5. International Peace and Justice, Cultural Studies
6. Area Studies: 9 hours in a region: African, Asian, Europe, Latin American, and Middle East. These courses are drawn from the following programs: Africana Studies, History, Geography, and Political Science.

African Emphasis
AFAS 3850 Caribbean Societies and Modernization
AFAS 3920 Post Independent Africa
AFAS 4120 Classical African Civilizations
AFAS 4200 African Roots
GEOG 4120 Geography of Africa
HIST 4850 History of Africa I
HIST 4860 History of Africa II
HIST 4890 Modern Africa, 1960-Present
Latin American Emphasis:
GEOG 3720 Geography of Mexico and the Caribbean
GEOG 3730 Geography of South America
GEOG 4000 Geography of Latin America
HIST 4510 Latin American History I
HIST 4520 Latin American History II
SPAN 3130 Latin America
Asian Emphasis:
HIST 4810 Asian Civilizations I
HIST 4820 Asian Civilizations II

GEOG 4110 Geography of Asia
Middle East Emphasis: (Courses Being Developed)
European Emphasis:
GEOG 3810 Geography of Europe
HIST 3010 Europe, 1648-1789
HIST 3020 Europe, 1789-1871
HIST 3030 Europe, 1871-1945
HIST 3040 Europe, 1945-Present
POLI 3620 Comparative European Government

## A History course taken in the core, cannot also be counted for elective credit.

2. International Security, Law and Organizations:

POLI 3630 International Organizations
POLI 3700 International Security Studies
POLI 4350 International Law
POLI 4050E Special Topics: Terrorism and Political Violence
3. International Development:

AFAS 4000 Political Economy of African Nations
AFAS 4450C Business Opportunities in Africa
AGSC 2020 Introduction to Agribusiness II
AGSC 3040 Agriculture Policy
AGSC 4040 World Agriculture
AGSC 4090 Community Development
ECON 4100 International Economics
ECON 4150 Economic Development
MGMT 4120 International Business Management
POLI 3930 International Political Economy
SOCI 4200 Population Problems
4. Foreign Policy Analysis/Comparative Politics:

HIST 4210 Diplomatic History of the United States I
HIST 4220 Diplomatic History of the United States II
POLI 3600 Introduction to Comparative Government and Politics
POLI 3620 Comparative European Government
POLI 3650 International Relations
POLI 3680 Third World Politics
POLI 3670 American Foreign Policy
POLI 4360 Middle East Politics
5. International Peace and Justice, Cultural Studies:

AFAS 4120 Classical African Civilizations
ANTH 2300 Introduction to Cultural Anthropology
ANTH 3100 Comparative Social Structures
COMM 4320 Intercultural Communications
PHIL 4100 Philosophy of Religion
RELS 4100 Contemporary Religious Thought
RELS 4200 African Roots in Christianity
SOCI 3550 Social Movements
Courses can be substituted under different areas of emphasis with permission of the Coordinator of the International Affairs Minor. (Students should see Coordinator for additional courses to be added to areas of emphasis.)

Minor in Women's Studies<br>Rebecca S. Dixon, Ph.D. (Coordinator)<br>121 Humanities Building<br>Telephone: 615-963-5728

Faculty: J. Anderson, S. Browne, R. Dixon, J. Hayes, G. Johnson, and S. Morgan-Curtis

The Minor in Women's Studies is open to any degree-seeking student at Tennessee State University. The Women's Studies Minor at Tennessee State University seeks to develop, enhance, and strengthen the University's general education program by providing an organizational structure for the focused study of women as serious academic inquiry. An 18hour undergraduate minor, the Women's Studies Program brings together and integrates courses from across many departments of the University that explore issues of gender, sexuality, and inequality through examinations of the lives of women, the work of women, and the social representations of women, in contemporary and historic contexts, around the globe and within the U.S., and across differing races, ethnicities, classes, and social groups. The Women's Studies Program is expressly multidisciplinary and interdepartmental, and its purpose is to provide a framework for new scholarship about women-multiculturally, multidimensionally, and multinationally. Within a University community richly diverse in gender, age, race, nationality, ethnicity, faith, economic structures, and sexual orientation, the Women's Studies program provides another forum for students to consider the social construction of difference through analyses of literature, the arts, the media, social theory, histories, and cultures. The Women's Studies Program at TSU promotes integrative thinking, reevaluation, and new ideas about women, as a local contribution toward expanded global understanding and respect for women.
Participating students may major in any area or program leading to a bachelor's degree at the University while taking the minor (18 semester hours).
The goal of the Women's Studies minor is to enhance students' understanding of the complexity of our shared world through the analysis of the construction of gender identities. The students as citizens and educated members/leaders of their communities and the world need to know and appreciate their own gendered human cultural heritage and its development in historic and global contexts. Because of its implicit multidisciplinary and interdisciplinary approach, the Women's Studies Program borrows substantively from all fields of study, and Women's Studies paradigms will
concomitantly serve to strengthen both the investigations and goals of students' major fields of study and their materials, and to deepen the students' appreciations of their own major fields.

## Core Required:

WMST 2000 Introduction to Women's Studies 3
WMST 4000 Independent Study/Capstone
3
Only one 2000 level class may be taken
12-Hours any 4 of the following:
AFAS 3000 African Male 3
AFAS 3050 African Female 3
AFAS 3600 African Extended Family 3
AFAS 3620 African American Family 3
ANTH 2300 Introduction to Cultural Anthropology 3
ECFS 4630 Family Relationships
ENGL 3010 Critical Approaches to Literature
ENGL 3860 Women in Literature
ENGL 4600 African-American Women Writers
HIST 3100 American Women's History to 1890
HIST 3110 American Women's History 1890 to the Present
HIST 4240 History of Feminism
PSYC 3310 Principles of Human Sexuality 3
SOCI 2400 Courtship and Marriage 3
SOCI 3101 Sex, Gender, \& Social Interaction 3
SOCI 3200 Anthropology 3
SOCI 3600 The Family
WMST 4100 Special Topics in Women's Studies

WMST 2000. Introduction to Women's Studies. (3). Functioning as an overview to and integration of the women's studies courses available to TSU students across the University, this introductory course to the Women's Studies program and minor offers a conceptual and theoretical baseline from which each student may develop her/his trajectory of study. The course is expressly multidisciplinary and multicultural; it explores feminist theories and looks at women and gender as treated in the humanities, social sciences, and sciences. This introduction may be team taught and may represent ideas from the perspectives of faculty within differing disciplines. No prerequisites.

WMST 4000. Capstone/Independent Study. (3). This one-semester course acts as the capstone for the Women's Studies minor in that the individual student will produce an independent research work that synthesizes his/her major field with the required course work in the Women's Studies minor. This course will be monitored by the WS Coordinator/Coordinating Committee, but the student will also work with a faculty member from her/his major area. Enrollment by permission of the WMST Coordinator/Coordinating Committee. Prerequisite WMST 2000 or by permission.

WMST 4100. Special Topics. (3). This interdisciplinary course can be proposed by the instructor either based on individual or student interest. The course must be approved by the Women's Studies Coordinating Council/Committee and fulfill the competencies of the Women's Studies Program. Topics may include but are not limited to the history of Women's Studies, representations of women in music, a comparative study of women's movements and activisms, feminism and racism, specific representations of women within different nationalities, etc. Permission of the instructor required.

## Arts and Sciences

## (Interdisciplinary Studies)

## Theron Corse, PhD., Interim Coordinator <br> 408 Hubert Crouch Hall <br> Telephone 615-963-5755

General Statement: The Arts and Sciences (Interdisciplinary Studies) degree program is a creative, flexible, and interdisciplinary program which allows students to concentrate their upper-level studies in one of the three concentrations: the humanities, the social sciences, or the natural sciences. The program exposes the student to the knowledge and methodologies of two specific disciplines within a given concentration.

The degree, which is the Bachelor of Science in Arts and Sciences, permits students to develop a personalized program of study in consultation with their advisor which would not be met through participation in a traditional discipline. This degree program is designed to provide students with flexibility while maintaining the quality and excellence expected of all degree programs. Students choose one of the three concentrations and then identify their first discipline which requires 15 semester hours of upper-level (3000-4000) courses, and a second discipline which requires 8 semester hours of upperlevel courses. For example, a student with a concentration in the humanities may choose any two of the following disciplines: Art, English, French, Philosophy, Religious Studies, Spanish, and Theatre. A student with a social sciences concentration may choose any two of the following disciplines: Africana Studies, Anthropology, Criminal Justice, Economics, Geography, History, Political Science, Psychology, Social Work, Sociology, and Communications. A student with a natural sciences concentration may choose any two of the following disciplines: Biology, Chemistry, Computer Science, Mathematics, and Physics.

A student may be allowed another combination of disciplines, provided he or she makes a reasonable case for it. However, this approach to the program is the exception rather than the rule. Ultimately, this combination must be approved by the Coordinator and the Dean's office prior to embarking on coursework rather than after the coursework has begun.

The degree is especially useful for some pre-professional curricula, such as pre-law, pre-pharmacy, pre-medicine, and pre-dentistry, because it allows the student to construct more easily a degree program from the required courses in various disciplines while gaining disciplinary knowledge which can be beneficial to success in the professional program. The degree is also useful for non-traditional students who desire a liberal arts education that will maximize their flexibility with the job market. Additionally, traditional students desiring a degree program that is not currently offered at the university may find this degree useful for constructing a degree program that allows them to gain the prerequisite skills, knowledge, and experience to fulfill their graduate school or career aspirations.

The Coordinator of Interdisciplinary Studies serves as the academic advisor for all students in the program, except for those who are seeking certification in Elementary Education.

Mission: The major in Arts and Sciences (Interdisciplinary Studies) is designed to prepare students to be life-long learners, effective community leaders, community service advocates, and productive global citizens who are able to understand and integrate diverse perspectives and methods to solve complex problems and produce practical applications and solutions to global issues.

Goals: It is the goal of the Arts and Sciences (Interdisciplinary Studies) Program: 1) to provide students with a flexible, individualized degree program that allows them to integrate disciplinary knowledge and methods to prepare for their personal, academic, and career goals; 2) to assist students in developing a personalized success plan that addresses their personal, academic, and professional goals; 3) to develop students who are able to engage in multiple perspective taking in order to integrate disciplinary and interdisciplinary knowledge and methods to solve complex global problems; 4) to produce students who are life-long learners, critical thinkers, and community service advocates.

## Program Learning Outcomes:

Students who graduate with a Bachelors of Science in Arts and Sciences should acquire:

1. the ability to describe a theme or problem from the perspective of different disciplines;
2. a basic knowledge of student's areas of study and an understanding of the techniques used by different disciplines to produce and analyze that knowledge;
3. the ability to integrate knowledge and modes of thinking drawn from two or more disciplines; and
4. the ability to produce an interdisciplinary understanding of a complex problem or intellectual question.

Program Requirements: 32 Semester Hours
For Bachelor of Science
Arts and Sciences (Interdisciplinary Studies Degree)
General Education Core
Communications: (9 hours)

| ENGL 1010, 1020 | Freshman English I, II <br> (Minimum grade of C in each) |
| :--- | :--- |
| COMM 2200 | Public Speaking |

COMM 2200
Public Speaking
Humanities and/or Fine Arts: (9 hours)

| ENGL 2110-2320 | Sophomore Literature Course | 3 |
| :--- | :--- | :--- |
| Elective | One course from approved list. | 3 |
| Elective | One course from approved list. | 3 |
|  |  |  |
| Social and |  |  |
| Elective | One course from approved list. | 3 |
| Elective | One course from approved list. | 3 |

HIST 2010
HIST 2020
American History I
3

HIST 2030
Istory II or
History of Tennessee
Natural Science: (8 hours)
Two four-hour courses with labs from approved 8 General Education list.

Mathematics: (3 hours)
One course from approved list.
Orientation: (1 hour)
UNIV $1000 \quad$ Service to Leadership 1
Total General Education Hours: 42

## Upper-division Admission

For admission to the upper-division program of the Interdisciplinary Studies major, the student must complete all of the requirements listed above under General Education Core and Other Requirements. In addition, one must have removed all high school deficiencies, passed all required remedial/developmental courses, and earned a cumulative grade point average of 2.0 on college-level course work.

Major Core: A minimum of 32 upper-level (3000- and 4000level) hours must be completed in Liberal Arts. For this purpose Economics, Computer Science, and Psychology are treated as Liberal Arts disciplines, although they are administered through other colleges in the University. Students must earn at least a C in all 32 of these hours.
a) Twenty-three upper-level hours must be completed in one of the three broad areas or concentrations: the humanities, the social sciences, or the natural sciences. Fifteen of these hours must be in a single discipline and eight must be in a second discipline from the same family.
b) Nine additional upper-level hours must be completed in Liberal Arts disciplines or in Economics, Computer Science, or Psychology.
Suggested Four-Year Plan:
Bachelor of Science Degree in Liberal Arts

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Social Science | 3 | Social Science | 3 |
| Elective | 3 | Natural Science | 4 |
| Natural Science | 4 | Elective | 3 |
| UNIV 1000 | 1 | Humanities | 3 |
|  | 14 |  | 16 |

SOPHOMORE YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| Elective Intro. Disc. I | 3 | Humanities | 3 |
| Sophomore Literature | 3 | Elective | 6 |
| HIST 2010 | 3 | HIST 2020 or 2030 | 3 |
| COMM 2200 | 3 | Elective Intro. Disc. II | 3 |
| MATH | 3 |  |  |
|  |  |  | 15 |

JUNIOR YEAR
$1^{\text {st }}$ Discipline 3000/ $\quad 3 \quad 1^{\text {st }}$ Discipline 3000/ $\quad 6$
4000
$2^{\text {nd }}$ Discipline $3000 /$
4000
Elective 3000/4000
Liberal ARTS
Electives (Any Level)

FALL SEMESTER
$1^{\text {st }}$ Discipline 3000/
4000
$2^{\text {na }}$ Discipline 3000/
4000
ELECTIVE, 3000/4000
Liberal ARTS
Electives 3000/4000
(Any School or College)
Elective (Any Level)

SENIOR YEAR

| HR. | SPRING SEMESTER | HR. |
| :---: | :--- | :---: |
| 3 | $1^{\text {st }}$ Discipline 3000/ | 3 |
| 3 | 4000 |  |
| 3 | Elective 3000/4000 |  |
|  | (Any School or College) |  |
| 3 | Elective (Any Level) | 6 |
| 3 |  | 6 |
| $\frac{3}{15}$ |  |  |
| 15 |  | 15 |

## Arts and Sciences

Interdisciplinary Studies
Certification in Elementary Education, Grades K-6 112 Clay Hall
Telephone 615-963-5459
General Statement: The University's teacher certification program in Elementary Education is located in the Interdisciplinary Studies Program of the College of Liberal Arts, in recognition of the fact that the modern teacher should be broadly educated with a firm foundation in the liberal arts. The teacher must not only possess knowledge of a variety of subject matter, but also an understanding of the psychology and the cultures of the students he or she will teach. America is an increasingly diverse society: it is estimated that by the year 2050 more than half of the school-age children will be of non-European descent.

The Elementary Education program offers the student the opportunity to prepare for a license to teach in grades Kindergarten through sixth grade. This means that the Tennessee Department of Education certifies that the individual is qualified to teach at those levels and thus is eligible to be hired by public school systems in the state. An
endorsement for a given grade level means that the student is especially well prepared for those grades, but is also eligible to teach at whatever level the license includes. The concentration is child development and learning, with licensure for grades K-6. The specific requirements are listed below. The coordinator of the Elementary Education program is the advisor for students seeking this license.

## Program Requirements for Bachelor of Science

- Arts and Sciences
- Certification in Elementary Education

All candidates for certification in elementary education will complete a minimum of 120 semester hours, to receive the B.S. degree in Arts and Sciences. These hours include a general education core ( 42 hours), a major concentration of content and knowledge courses ( 26 hours), and a professional education core (37 hours), including one semester of student teaching in primary and middle schools ( 9 hours). To be eligible for admission to any certification program in the University, students must have at least a 2.75 cumulative quality point average at the time of application and must earn acceptable scores on the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT, or a combined 990 on the verbal and mathematics portions of the SAT are exempt from the PPST. Students must also make a written application through the College of Education before being formally admitted to the program, usually during the sophomore year. For a complete statement of admission and retention requirements in the Teacher Education Program, see the section in the college of Education in this catalog.

Accreditation: The teacher certification program in Elementary Education, with its concentration, is approved by the Tennessee Department of Education. In addition, the teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

Specific course requirements in General Education, Other Requirements, the Professional Education curriculum, and the concentration follow.

The Tennessee Board of Regents Teacher Education Redesign Initiative, Ready2Teach, will officially begin in the fall semester of 2013. Ready2Teach requires residency in K-12 schools during the senior or final year (fall and spring) of undergraduate teacher licensure programs. The residency year includes Residency I during the fall semester and Residency 2 during the spring semester. Residency 1 will include methods courses and 90+ hours field study in K-12 schools. Residency 2 requires a full semester ( 16 weeks) of student teaching. Residency 1 will only be offered in the fall while Residency 2 will only occur in the spring. This initiative applies to all undergraduate teacher education candidates pursuing teacher licensure. All programs of study will be changed to reflect the new program beginning in the fall semester of 2013. Students are required to seek advisement regarding their licensure programs as early as possible during their academic career at Tennessee State University to ensure that all prerequisite courses and Praxis exams are complete in preparation for Residency.

## General Education Core 42 Semester Hours

The general education arts and sciences component is designed to foster the intellectual development of the whole person and provide the foundation of a broad college education.


| Other Requirements: 18 - Hours |  |  |
| :---: | :---: | :---: |
| Mathematics (3 | (3 hours) |  |
| MATH 1420 St | Structure of Number System II (MATH 1110 or higher may be used.) | 3 |
| History:(6 hours) |  |  |
| HIST 1210 or 1220 | 220 World History I or II | 3 |
| HIST 4910 or 4920 | 920 African American History | 3 |
| Psychology: (3 hours) |  |  |
| PSYC 2420 H | Human Growth and Learning | 3 |
| Human Performance and Sports Sciences: (6 hours) |  |  |
| HPSS 2060 or Fir | First Aid and Cardio-Pulmonary | 3 |
| HPSS 1510 Re | Resuscitation or HPSS 1510 Health and Wellness |  |
| HPSS 3100 Co | Concepts of Games and Play | 3 |
| HIST 4910 or Af | African American History | 3 |

Professional Education: 37 Semester Hours
Professional education course work and related field and laboratory experiences are required to give the prospective elementary school teacher the knowledge, skills, and practical experience needed for a successful career. Students must be officially admitted to the Teacher Education Program before they can register for any of these courses, with the exception of EDCI 2010.

| EDCI 2010 | History and Foundations of Education | 3 |
| :--- | :--- | :--- |
| EDCI 3110 | Classroom Management | 3 |
| EDCI 2100 | Field Study in Education I | 2 |
| EDRD 3500 | Literacy Methods I | 3 |
| EDCI 3500 | Instructional Strategies in the | 3 |
|  | Elementary Classroom | 2 |
| EDCI 2200 | Field Study in Education II | 3 |
| EDCI 4500 | Math/Science Instructional Strategies | 3 |
| EDRD 4500 | Literacy Methods II | 3 |
| EDRI 4620 | Field Study in Education III | 3 |
| EDCI 4706 | Educational Seminar | 3 |
| EDCI 4720 | Student Teaching | 9 |

Major Emphasis 26 Semester Hours:
PSYC 2010 General Psychology 3
ECFS $2010 \begin{array}{ll}\text { Principles and Concepts of } \\ & \text { Child Development }\end{array}$
ECFS 3610 Early Childhood Curriculum I 3
ECFS 3320 Creative/Expressive Arts 3
ENGL 3730 Children's Literature 3
EDCI 4900 Multicultural Education 3
PSYC 3120 Measurement \& Eval. In The Classroom 3
EDSE 3330 Education of Exceptional Students 3
EDCI 4190 Technology in the Schools 2

Each teacher candidate, regardless of concentration, must complete EDCI 4720, Enhanced Student Teaching in the Elementary School (9 hours). The student teaching experience includes an entire semester of teaching divided between primary and middle grades. Teacher candidates seeking to focus on early grades have field experiences in kindergarten in addition to elementary school and middle school.

The awarded diploma reads: "Bachelor of Science in Liberal Arts." The teaching license reads "Elementary Education (K6)."

## Suggested Four-Year Plan: <br> Concentration in Child Growth and Development Licensure for Grades K-6

## FRESHMAN YEAR

FALL SEMESTER HR SPRING SEMESTER HR

| ENGL 1010* | 3 | ENGL 1020* | 3 |
| :---: | :---: | :---: | :---: |
| HIST 1210 or 1220 | 3 | ART101 0 | 3 |
| MATH 1410* | 3 | MATH 1420* | 3 |
| BIOL 1010, 1011* | 4 | Second 4 Hour Science* |  |
| COMM 2200 | 3 | PSYC 2010 | 3 |
| UNIV 1000 | 1 |  |  |
|  | 17 |  | 16 |
|  | SOPH | OMORE YEAR |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ENGL-Sophomore | 3 | Humanities - MUSC | 3 |
| Literature |  | 1010 |  |
| HIST 2010 or 2020 | 3 | HIST 2030 | 3 |
| ECFS 2010 | 3 | $\begin{aligned} & \text { SOCI } 2010 \text { or POLI } \\ & 2010 \end{aligned}$ | 3 |
| PSYC 2420* | 3 | HPSS 2060 or HPSS 1510 | 3 |
| EDCI 2010* | 3 | GEOG 1010 or 1020 | 3 |
|  | 15 |  | 15 |

*Prerequisite for admission to Teacher Education
(Apply to Teacher Education; a GPA of 2.75 is required and appropriate scores on the PPST or ACT)

| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 3730 | 3 | EDCI 4900 | 3 |
| EDCI 2100** | 2 | PSYC 3120 | 3 |
| EDCI 3110** | 3 | ECFS 3320 | 3 |
| HPSS 3100 | 3 | EDCI 2200** | 2 |
| EDSE 3330 | 3 | EDCI 3500** | 3 |
| EDCI 4190** | 2 | EDRD 3500** | 3 |
|  | 16 |  | 17 |
| (Apply for Student Teaching) |  |  |  |
|  | SENIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIST 4910 or 4920 | 3 | EDCI 4706** | 3 |
| ECFS 3610 | 3 | EDCI 4720** | 9 |
| EDCI 4620** | 3 |  |  |
| EDCI 4500** | 3 |  |  |
| EDRD 4500** | 3 |  |  |
|  | 15 |  | 12 |
| *(No other courses may be taken during this semester.) |  |  |  |
| **Must be admitted to Teacher Education to take this course. |  |  |  |
| Course Descriptions erdisciplinary Studies (INDS) |  |  |  |

INDS 3000 Interdisciplinary Studies Workshop (3). This course will enable students to develop an understanding of the concepts of disciplines, interdisciplinarity, and interdisciplinary research. Student will produce a project design for a project to be completed in INDS 4000 (Senior Project). Prerequisite: Permission of the program coordinator.

INDS 3200 Short-Term Study Abroad (3). Enrichment of general education in the arts and sciences through international travel, typically as a part of a faculty-led student group. May be repeated for a total of 6 credit hours. Prerequisites: Completion of at least 30 hours and permission of the instructor.

INDS 4100 Interdisciplinary Studies Internship (3). A practicum or internship with an agency (public or private) pursuing activities related to one or both of the student's concentrations in order to provide the student with on-the-job experience. The details of the internship are negotiated among student, agency, and instructor. A major paper is required for successful completion of course, as well as a satisfactory evaluation by both instructor and internship supervisor. The course may be repeated with the Coordinator's approval for up to 3 hours of credit. Prerequisites: Junior standing and one semester or more in the degree program, or approval of the Coordinator.

INDS 4000 Interdisciplinary Studies Senior Project (3). A onesemester senior project for students majoring in Interdisciplinary Studies. The primary assignment of INDS 4000 is a project whose form and scope will ordinarily be developed by the student in INDS 3000 , and should generally be taken during the fall or spring semester of a student's senior year. Students wishing to enroll in the course under other circumstances may do so only with the approval of the instructor and the program coordinator.

## Department of Art

Carlyle Johnson, Department Chair
116 Jane Elliott Hall (Women's Building)
Telephone 615-963-5921
Faculty: B. Donahue, S. Dunson, C. Gadsden, X. Guo, M. McBride, J. McKinney, K. Sales
Administrative Assistant: J. Allen
General Statement: The department of art is a community of scholars, both faculty and students, engaged in a common pursuit of knowledge. Our goal is to be a facilitator of learning: to prepare competent and caring practitioners with multicultural perspectives. The mission of the Department of Art at Tennessee State University is to:

1. provide a four year course of study for students desiring to enter the work force in the visual arts;
2. provide a four-year course of study for students desiring careers as elementary and/or secondary art teachers;
3. help students develop an attitude, which leads to continued study at a more advanced or professional level in the field, as well as to engage in life-long learning practices;
4. provide service courses for students engaged in study within other units of the university;
5. provide an opportunity for the campus and the community at large to gain exposure to the range and vitality of contemporary art and contemporary concerns in art education through exhibitions, lectures, visiting artists, and seminars;
6. provide a historical context for personal study and development in the visual arts and/or visual arts education.

Accreditation: The Art program is accredited by the National Association of Schools and Art and Design (NASAD), the Tennessee Department of Education, and the National Council on the Accreditation of Teacher Education (NCATE).

## Departmental Requirements:

- 60 Semester hours in Studio Concentrations for Bachelor of Science Degree
- 57 Semester hours in Art Education

The Department of Art offers a major in Art leading to the degree of Bachelor of Science with concentrations in Studio Art and Art Education.

- 120 semester hours are required for the Bachelor of Science in Studio
- 120 semester hours are required for Art Education
- 18 semester hours of approved courses in Art for the minor.

Students who wish the Bachelor of Science Degree with licensure (teacher certification) to teach Art in grades K-12 must seek formal admission to the program through the College of Education, during the sophomore year. They must have a 2.75 cumulative quality point average at time of application for admission and must pass the Pre-Professional Skills Test (PPST) or the Computer-Based Academic Skills Assessments Test (CBT). Students who have previously earned a 21 on the ACT, 22 on the Enhanced ACT or a combined 990 on the verbal and mathematics portions of the

SAT are exempt from the PPST or the CBT. For a full statement of admission and retention requirements see the Teacher Education Program under the College of Education section. Students are required to student teach at both elementary and secondary schools to fulfill the certification requirements. Satisfactory completion of the program results in licensure for teaching grades K-12 in Tennessee public schools.

The Tennessee Board of Regents Teacher Education Redesign Initiative, Ready2Teach, will officially begin in the fall semester of 2013. Ready2Teach requires residency in K-12 schools during the senior or final year (fall and spring) of undergraduate teacher licensure programs. The residency year includes Residency I during the fall semester and Residency 2 during the spring semester. Residency 1 will include methods courses and 90+ hours field study in K-12 schools. Residency 2 requires a full semester ( 16 weeks) of student teaching. Residency 1 will only be offered in the fall while Residency 2 will only occur in the spring. This initiative applies to all undergraduate teacher education candidates pursuing teacher licensure. All programs of study will be changed to reflect the new program beginning in the fall semester of 2013. Students are required to seek advisement regarding their licensure programs as early as possible during their academic career at Tennessee State University to ensure that all prerequisite courses and Praxis exams are complete in preparation for Residency.

## General Education Core:

Communications: (9 hours)
$\begin{array}{lll}\text { ENGL 1010, } 1020 & \text { Freshman English I, II } & 6 \\ \text { COMM 2200 } & \text { Public Speaking } & 3\end{array}$
Humanities and/or Fine Arts: (9 hours)
ENGL 2013-2322 Sophomore Literature Course 3
ART $1010 \quad$ Art Appreciation 3

Approved Elective 3
Social and Behavioral Science: (6 hours)
SOCI $2010 \quad$ Introduction to Sociology
Approved Elective 3
History: (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science: (8 hours)
PHYS 1030
BIOL 1010/1011 Introductory Biology I with lab 4
Mathematics: (3 hours)
MATH 1013 Contemporary Mathematics
Orientation: (1 hour)
UNIV 1000 Service to Leadership
1

Total General Education Hours with Orientation 42

## Upper-division Admission

For admission into the upper-division program of Art, students must complete all of the General Education Core and Major Art Core Requirements. They must have also removed all high school deficiencies; passed all remedial/developmental courses, and earned a cumulative grade point average of 2.0 or above on college-level course work and completed the Sophomore Portfolio Review. Art majors must earn at least a " $C$ " in courses used to satisfy department requirements. Any classes with grade below a C will have to be repeated.

Major Core: Art majors must earn at least a C in the following courses, as well as in the other courses used to satisfy Departmental requirements. If majors earn less than a C, they
must repeat the course until they raise the grade to at least a C.

| ART 1210 | Fundamentals of Drawing | 3 |
| :--- | :--- | :--- |
| ART 1220 | Figure Drawing | 3 |
| ART 1310 | Design I | 3 |
| ART 1320 | Design II | 3 |
| ART 2010 | African American | 3 |
| ART 4490 | Portfolio Seminar | 3 |
| ART 4500 | Senior Project | 3 |

aditional Art courses are required, depending on the degree program one pursues. For these courses, see the following four-year plans. Students may count no more than 9 hours of Individual Problems courses (ART 4000)

Suggested Four-Year Plan:
Bachelor of Science Degree in Art Concentration in Studio Art

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | ART 1220 | 3 |
| ART 1210 | 3 | ART 1320 | 3 |
| ART 1310 | 3 | MATH 1013 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| ART 1010 | 3 | COMM 2200 | 3 |
|  | 13 |  | 15 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 2010 | 3 | HIST 2020 | 3 |
| ART Concentration | 3 | ART Concentration | 3 |
| PHYS 1030 | 4 | BIOL 1010, 1011 | 4 |
| ENGL 2010 or 2020 | 3 | ART Elective | 3 |
| HIST 2010 | 3 | SOC/BEH SCI Elective | 3 |
|  | 16 |  | 16 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 3310 | 3 | ART 3320 | 3 |
| ART Concentration | 3 | ART Concentration | 3 |
| ART Studio Elective | 3 | ART Studio Elective | 3 |
| Humanities Elective | 3 | SOC/BEH SCI Elective | 3 |
| General Elective | 3 | General Elective | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 4490 | 3 | General Elective | 3 |
| ART HIST Elective | 3 | ART 4000 | 3 |
| ART Studio Elective | 3 | ART Studio Elective | 3 |
| ART 4500 | 3 | General Electives | 6 |
| General Elective | 3 |  |  |
|  | 15 |  | 15 |

Suggested Four-Year Plan - Total 120
Bachelor of Science Degree in Art With Teacher Certification
Licensure for Grades K-12

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 1210 | 3 | ART 1220 | 3 |
| ART 1310 | 3 | ART 1320 | 3 |
| ENGL 1010 | 3 | MATH 1110 | 3 |
| ART 1010 | 3 | COMM 2200 | 3 |
| ART 2410 | 3 | ENGL 1020 | 3 |
| UNIV 1000 | 1 |  |  |
|  | 16 |  | 15 |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 2010 | 3 | PSYC 2420 | 3 |
| ENG 2010 or 2013 | 3 | ART 2210 | 3 |
| BIOL 1010/ 1011 | 4 | PHYS 1030 | 4 |
| HIST 2010 | 3 | SOCI 2010 | 3 |
| EDCI 2010 | 3 | HIST 2020 | 3 |
|  | 16 |  | 16 |
|  | JUNIOR YEAR |  |  |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| ART 3310 | 3 | ART 3600 | 3 |
| ART 3010 | 3 | Humanities Elective | 3 |
| ART 3500 | 3 | ART 3320 | 3 |
| SOC/SCI | 3 | EDCI 3870 | 3 |
| EDSE 3330 | 3 | EDRD 4910 | 3 |
|  |  |  |  |
|  | 15 |  | 15 |
|  | SENIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ART 4500 | 3 | ART 4720 | 9 |
| EDCI 4620 | 6 | EDCI 4705 | 3 |
| ART 3710 | 3 |  |  |
| ART 4490 | 3 |  | 12 |
|  | 15 |  |  |

*These courses should be in the student's declared studio concentration.

## Course Descriptions <br> ART (ART)

ART 1010 Art Appreciation (3). A course for all students interested in understanding the visual arts in everyday experiences. The course surveys the visual arts, including fundamental and historical distinctions between and connections between global art forms. This course may be used towards satisfying the University's humanities requirement.
ART 1011 Honors Art Appreciation (3). Honors section of ART 1010 emphasizing the visual arts for students including fundamentals and distinctions between Art Media and periods. This course includes videos of contemporary African American Artists and other 20th and 21st Century Artists. Art 1011 satisfied the University humanities requirements. Enrollment is limited to members of the University Honors Program.

ART 1012 Art History and Appreciation (3). A course designed to expand aesthetic awareness and understanding of visual arts, with traditional focus on the history of art and the impact the artist has on society. This course may be used to remove high school deficiency in the visual and performing arts; if it is used for this purpose, it does not yield credit toward the college degree.
ART 1030 Freshman Seminar (1). Introduction to major disciplines in art and practical aspects of a career in art. Course covers such topics as art as a profession, developing a studio work ethic, safety for studio artist, and selected readings for the Art Core. Required of all art majors.

ART 1210 Fundamentals of Drawing I (3). An introduction to various tools, techniques, and materials of basic drawing. The course studies perspective and the function of the visual elements of compositions.

ART 1220 Figure Drawing II (3). An exploration of formal and expressive potentials of the figure, with traditional and experimental approaches to drawing. Prerequisite: ART 1210.

ART 1310 Design I (3). A basic approach to the visual elements and principles of design as they related to two-dimensional problems. Problem stating and problem solving are a vital part of the course with emphasis on design theory, materials and techniques.
ART 1320 Design II (3). An introduction on how to think outside the flat box utilizing three-dimensional media, design and design principles through creative projects dealing with simple construction techniques, mass, volume, space and variety of media. Applicable to art majors and students interested in design and three-dimensional media.

ART 2010 African-American Art I (3). A survey of African American visual arts beginning with African roots and influences in the Americas and Caribbean Islands and highlighting the emergence of artists of African descent in the United States.

ART 2210 Painting I (3). An introduction of the study of color, composition and methodology. Students will learn how to prepare sound paintings, supports of canvas, panel and paper. The study of the versatile applications of oils and acrylics will be explored. Prerequisites: ART 1210, 1310 OR 1320.

ART 2310 Painting II (3). This course will offer a combination of technical and conceptual fundamentals of painting. Students will explore spatial organization through observation and abstraction. The student will experiment with problem solving techniques which will advance the individual's personal artistic statement. Prerequisites ART 2210.

ART 2410 Crafts (3). An introduction to various media, methods, and techniques of creative art production in two and three-dimensional art making. This course is primarily designed for prospective K-12 art specialists whose desire is to improve their knowledge, skills, and understanding of art production. Clinical and field based experiences which call for active participation by students are part of the course requirements.

ART 2510 Lettering and Layout I (3). Technique of letter indication, finished lettering, letter design, and typography, usage, and adaptation of lettering skills to practical problems. Prerequisite: ART 1310,1320 or permission of instructor.
ART 2530 Illustration I (3). The art of illustration as used by the graphic designer/commercial artist. The course includes a study of the history of illustration, methods, tool and techniques. Prerequisite: ART 1210, 1310.

ART 3000 Aesthetics (3). Problems in philosophy of art and art criticism; aesthetic experience; truth and art; aesthetic value.

ART 3010 Ceramics I (3). Emphasis on clay as a creative medium as African masks, cultural masks and various projects are explored through hand-forming techniques, utilizing functional and sculptural forms. Students explore surface decoration, extruded forms, kiln firings, clays, glazes and an introduction to the potter's wheel.

ART 3020 Ceramics II (3). Emphasis on the potter's wheel and wheel throwing techniques for traditional and non-traditional functional forms. Students explore kiln firings, clays and glazes. Hand forming methods may be maximized to express conceptual series.
ART 3030 Jewelry and Metalsmithing I (3). Introduction to basic techniques, design and concepts of jewelry, Metalsmithing and small sculptural forms. Techniques include African glass bead making, stone setting, soldering, sheet and wire forming. Students buy their own material: i.e., metal, stones, plastic or glass depending on the student's own design and budget. Prerequisites: ART 1220, 1320 or permission of instructor.

ART 3040 Jewelry and Metalsmithing II (3). Advanced techniques in jewelry, Metalsmithing and small sculptural forms. Techniques include lost wax casting, chasing, repousse African glass beadmaking, bezel setting of stones, fabrication and design. Students buy their own material, i.e., metal, stones, plastic or glass, depending on the student's own design and budget. Prerequisite: ART 3030 or permission of Instructor.
ART 3060 Illustration (3). Continuation of ART 2530 with a focus on in depth work in any chosen medium including combinations of media. Prerequisite: ART 2530

ART 3100 Advanced Drawing and Pictorial Design I (3). Advanced composition, stressing figure. Prerequisites: ART 2200 or permission of the instructor.

ART 3110 Graphic Design (3). A problem-solving approach to visual communication, with a special concern for word and image. The course emphasizes the understanding of design, theories, and skills with a focus on the social and cultural dimensions of communication. Prerequisite: ART 1310, 2510 or permission of Instructor.

ART 3120 Production (3). Technology and skills necessary for the designer/ artist. Courses include digital technology preparation of finished art suitable for reproduction. Prerequisites: ART 1310, 2510, Sophomore Review.

ART 3130 Advanced Illustration (3). Study of advanced pictorial concepts, methods, and techniques. Prerequisite: ART 3060, Sophomore Review.

ART 3200 Advanced Drawing and Pictorial Design II (3). Advanced composition, stressing figure. Prerequisite: ART 3100 or permission of instructor.

ART 3210 Intermediate Painting (3). In this course, a conceptual, theoretical approach to painting will be emphasized; lectures, field trips and critical discussions on current directions in painting will be discussed. This course will challenge the student's personal artistic style through the introduction of a variety of new media painting styles. Prerequisite: ART 2210 or permission of instructor.
ART 3260 Photography (3). The fundamentals of photographic process, including the proper use and maintenance of the digital camera, and related equipment.
ART 3300 Watercolor Painting (3). Composition in transparent and opaque watercolor.

ART 3310 Art History I (3). An introductory survey of the development of the visual arts from the Paleolithic period through the Gothic Period.

ART 3320 Art History II (3). An introductory survey of the development of the visual arts from the late fourteenth century through the contemporary period.

ART 3410 Sculpture I (3). Study of the figure, modeling, casting and construction with a variety of media including metals in an introduction to sculptural techniques and conceptual ideas. Class includes videos and information about African American 20th and 21st century sculptors.

ART 3420 Sculpture II (3). Figurative and portrait sculpture projects using the model to express conceptual ideas. Continued development of sculptural techniques and concepts. Students complete several projects and work of the student's choice. Prerequisite: ART 3410.
ART 3500 Printmaking I (3). An introductory course in the art of printmaking, its history, methods, and techniques, including a comprehensive study of various printmaking processes with an emphasis on the less toxic approach. Prerequisites: 1210, 1310, 1320 or permission of instructor.

ART 3510 Printmaking II (3). A continuation of Printmaking I with an emphasis on advances techniques, focusing on the definition of imagery as well as exploring non-traditional techniques. Prerequisite: ART 3500.

ART 3520 Intermediate Printmaking I (3). In-depth work in any chosen medium, including combinations of media. Prerequisites: ART 3500 and 3510.

ART 3600 Public School Art (3). A survey of various education theories and problems encountered on the elementary and secondary levels. Course includes observation and participation in clinical and field-based experiences. Required of all students seeking certification in Art. Prerequisite: official admission to the Teacher Education Program.

ART 3710 Art Education Methods (3). A course designed to give students experience and methods, materials, and media as they relate to the art program in grades K-12. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Art. Prerequisite: official admission to the Teacher Education Program.

ART 4000 Individual Problems (3 to 9). Prior to enrolling for individual problems, students must have a form signed by the instructor and the Department Chair. Forms are available in the Art Office. Upper-level art majors only. Art students can count no more than 9 hours of Individual Problems toward the major in Art.

ART 4090 Ceramics III (3). Advanced problems in technical and conceptual areas in clay that relate to the student's individual approach.

ART 4120 Advanced Graphic Design (3). A continuation of Art 3110, with an emphasis on Graphic imagery, topography and layout. Prerequisites: ART 2510, 3110, Sophomore Review or permission of instructor.

ART 4150 Sculpture III (3). Students create a series of works intended to advance individual student expression of conceptual idea through sculptural media in consultation with the instructor. Students develop work in one of the following areas: casting, mold making, figurative works, installations, clay, multi-media, wood, glass or metal fabrication. Prerequisites: ART 3410 and 3420.

ART 4170 Advanced Photography (3). Emphasis on individual approaches to the photographic process.

ART 4210 Advanced Painting I (3). This is an open studio course which allows the student to identify the strengths and weakness in their paintings. The goal is to produce a self-defined body of work. Each student will create a contract stating the concept, material and amount of work that will be produced by the end of the semester. Student will sue the collective knowledge of the prerequisite courses to exhibit the relationships between form and content and the processes and materials explored. Prerequisites: ART 3210 and 3220, or permission of instructor.

ART 4340 Art History III (3). A course dealing with a variety of special topic in the development of the visual arts.

ART 4400 Intro/Desktop Publishing (3). Adobe CS basics, screen, menus, palettes, and other tools used together to create, modify, close, and open publications.

ART 4450 Entrepreneurship in the Arts (3). An examination of how arts professions and arts economies operate and evolve, as well as how they interact within the larger economy. Students explore opportunities in smaller economic settings. Major project includes designing and executing an entrepreneurial project. Elective course for Art majors. Junior Standing

ART 4490 Portfolio Seminar (1). Development of a portfolio, graduate school application, and a personal artistic statement. Students must provide documentation of their work as part of their final grade. Students must earn at least a B in the course to be eligible for the senior review and for graduation. Required of all Art majors in their senior year. Prerequisite: Sophomore Review.

ART 4500 Senior Project I (3). Project designed to give senior Art majors the opportunity to select and develop creative and written research related to art. The project is done under the supervision of the student's advisor and the Department Chair. Required of all Art majors. Students must earn at least a B in the course to be eligible for the senior review and for graduation.

ART 4520 Advanced Printmaking (3). An advanced printmaking course with emphasis on in-depth, individual approaches in various printmaking processes. Prerequisite: ART 3490 or permission of instructor.
ART 4550 African-American Art II (3). A study of the development of African American visual arts from the twentieth century to the present period.
ART 4720 Enhanced Student Teaching in Elementary and Secondary School (9). A semester-long experience of supervised practice teaching, appropriately divided between elementary and secondary levels. Required of all students seeking certification in the teaching of Art. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently.

# Department of Communications 

Terry Likes, Ph.D., Chair<br>105 Performing Arts Center<br>Telephone 615-963-7992

Faculty: S. Caraballo, M. Ginther, P. Idoye, C. Jackson, K. Johnson, L. James, J. Mitchell, D. Page, M. Richie, J. Stephens, Q. Tang, T. Winston.
Professional Staff: M. Collino, S. Laflin, J. Richie, D. Wilson Office Staff: T. McGarr, R. Spurlock

General Statement: The Department of Communications offers programs leading to the Bachelor of Arts and the Bachelor of Science degrees with a major in Communication. Within the major, the Department offers concentrations in Mass Communication (Journalism, Film \& Television, Media Leadership \& Performance or Integrated Marketing Communication), Communication Studies (Intercultural Communication and Health Communication) and Theatre (Performance and Production). A minor in Communication is also offered, with requirements varying by area of interest.

The programs for the Bachelor of Science and the Bachelor of Arts degrees require a minimum of 120 semester hours with 42 of these hours being courses numbered on the 3000 and 4000 levels.

Majors in the Department of Communications are encouraged to pursue a second major or a minor. A foreign language is also encouraged. Students completing a foreign language through the intermediate level (2010 and 2020, or higher) earn the B.A. degree. Students completing less foreign language, or no foreign language, earn the B.S. degree.

Students must earn grades of $C$ or better in all courses used to satisfy requirements for the major. This includes COMM 1040, COMM 2200 and THTR 1020. Students receiving D or F grades in major core courses must repeat those courses to obtain a C or better. The Department encourages participation in co-curricular organizations and activities, including WTST Campus Radio, TSU TV News, TSU TV Program Production, TSU News Network, The Meter student newspaper, the student-run advertising/public relations agency, the National Broadcasting Society/Alpha Epsilon Rho, the Forensics team, theatre productions and T. E. Poag players.

Departmental Requirements for Bachelor of Arts and Bachelor of Science Degrees:
Major Core Courses: 48-Hours
Major Core: 18 -Hours (*12-Hrs in Major, 6 -Hrs in General Education)
Mass Comm concentration Core: 12; (Track 15; Electives 6) (*1020 and 2200 are counted in the General Education core on the student's advising form, not under the major)

Major Core: (9-hours)
COMM 3150 Communication Research Methods
COMM 3950 Internship or (3) 3910 COMM Lab (see sections below)
COMM 4500 Senior Project
or
COMM 4510 Senior Seminar (News: Multimedia, Prod: TBA, IMC: Integrated Marketing Research or Brand Equity Management)

## Mass Communication Concentration

Concentration Core: 18 hours
1040 Intro to Mass Communication
1050 Technologies and Techniques of Digital Media (2 hrs) (fall/spring/maymester)
1060 Fundamentals of Media Writing (1 hr) (fall/spring)
2400 NewsWriting (News) (fall/spring) or 2500 Electronic Media Writing. (Prod) (fall/spring)
2640 Digital Media Production (fall/spring/summer)
2800 Race, Gender, Class in Global Media (fall/spring)
3520 Communications Law and Ethics (fall/spring)
*Choice of Journalism, Film \& Television Production,
Integrated Marketing Communication or Media Leadership \& Performance track 15 hours
Journalism track
COMM 3300 Print/On-line News Reporting 1
COMM 3400 Radio News Reporting 3
COMM 3800 TV News Reporting 3
COMM 4050 News Editing 3
Choice of:
COMM 4350 or Radio-TV News II 3
COMM $4360 \quad$ Print-Online News II 3
Film \& Television Production track
COMM $3240 \quad$ Audio Production 3
COMM 3440 Video Studio Production 3
COMM $4150 \quad$ Visual Storytelling II 3
COMM 4550 Audio/Video Post Production 3
Choice of:
COMM 4500 or Senior Project 3
COMM 4510 Senior Seminar 3

Integrated Marketing Communication track
COMM 3160 Integrated Marketing Comm. 3
COMM $4460 \quad$ Creative Advertising Strategies 3
COMM $4480 \quad$ Principles of Public Relations
COMM 4580 Advanced Public Relations 3
Choice of:
COMM 4500 Senior Project 3
COMM 4510 Senior Seminar:
Integrated Marketing Research or Brand Equity Management (spring)

Media Leadership \& Performance track Required:
COMM 4380 Media Leadership \& Entreneurship
COMM 4400 Programming (fall only)
COMM 4480 Principles of Public Relations
Choose TWO of the following:
COMM 2600 Process and Effects of the Media 3
COMM 2620 Basic Media Performance 3
COMM 3335 Sales Promotion 3
COMM 3370 Media \& Culture 3
COMM 3620 Advanced Media Performance 3
COMM 4230 Organizational Communication 3
COMM 4255 Crisis Communication 3
COMM 4260 Computer-Mediated Communication 3
THTR 2630 Voice for the Actor
THTR 3720 Acting for the Camera
Mass Communication Electives (Choose 9 hours)
2620 Basic Media Performance (fall/spring)
3000 Media Careers (2) (fall/spring)
3335 Sales Promotion (3)
3550 Producing Digital Media (3)
3610 Basic Recording Studio (2640, 3240 prereq) (fall/spring)
3615 Live Sound Reinforcement (3)
3620 Advanced Media Performance (2620 prereq) (spring)
3700 Entertainment Program Production (3) (2640 prereq)
3910 Communications lab ( 1.0 credit-- (fall/spring) may be repeated for a total of 3.0 credits)
3910-01 Radio
3910-02 Radio News
3910-03 TV News
3910-04 PAC House Production
3910-05 Magazine (The BluePrint)
3910-06 TSU News Network
3910-07 IMC Practicum
3910-08 Sports
3910-09 TV Production
3910-10 The Meter
4050 News Editing (tba)
4060 Investigative Reporting (tba)
4080 Sports Journalism (2400, 2640 and one of the following:
3300, 3400, 3800)
4090 Sports Production (3)
4100 Editorial Writing (tba)
4380 Media Leadership \& Entrepreneurship (spring)
4400 Programming (fall)
4415 Feature Writing (tba)
4450 Entrepreneurship for the Arts
4530 Reviewing and Criticism (tba)
4600 Special Topics (as needed)
4610 Adv. Recording Studio (3610 prereq) (spring)
4615 Audio for Video (3615 prereq)
4800 Independent Study (fall/spring)
4850 Communications Practicum (fall/spring)
Communication Studies Concentration Core: 15 hours
COMM 2100 Fundamentals of Speech Communication (3)
COMM 2300 Business and Professional Speaking (3)
COMM 3100 Communication Theory (3)
COMM 4210 Small Group Communication (3)
COMM 4250 Leadership Communication (3)

Track (Choose 15 hours of 18 within the track - in consultation with advisor and course availability)
Intercultural Communication
*choose from 4 of 5 below (3330-4340)
COMM 3330 Gender Communication 3
COMM $3370 \quad$ Media \& Culture 3
COMM 4300 Interpersonal Communication 3
COMM 4310 Intercultural Communication 3
COMM 4340 African American Rhetoric 3
*choose 4500 or 4510
COMM 4500 Senior Project (3) (project emphasis 3 on Intercultural Communication)
or
COMM 4510 Contemporary Issues in Intercultural 3 and International Communication

Health Communication

* choose from 4 of 5 below (3340-4300)

COMM 3340 Health Communication 3
COMM 4230 Organizational Communication 3
COMM 4240 Health Communication Campaigns 3
COMM 4255 Crisis Communication 3
COMM 4300 Interpersonal Communication 3
*choose 4500 or 4510
COMM 4500 Senior Project (project emphasis on 3 Health Communication) or
COMM 4510 Contemporary Issues in Health 3
Communication
Electives (Choose 12 hours - in consultation with advisor and course availability)

Intercultural Communication

| COMM 3200 | Advanced Public Speaking | 3 |
| :--- | :--- | :--- |
| COMM 3950 | Internship | 3 |
| COMM 4210 | Small Group Communication | 3 |
| COMM 4230 | Organizational Communication | 3 |
| COMM 4260 | Computer-Mediated Communication | 3 |
| COMM 4345 | Race, Power \& Communication | 3 |
| COMM 4365 | African American Family | 3 |
|  | Communication |  |
| COMM 4370 | African American Relational | 3 |
| COMM 4800 | Communication |  |
| Independent Study | 3 |  |
| SOCI 3700 | Minority Group Problems | 3 |
| SOCI 3950 | Racism: A Sociological Analysis | 3 |
| Any Upper level | AFAS course | 3 |

Health Communication
COMM 3200 Advanced Public Speaking 3
COMM 3220 Argumentation \& Debate 3
COMM 3330 Gender Communication 3
COMM 3370 Media \& Culture 3
COMM 3950 Internship 3
COMM 4210 Small Group Communication 3
COMM 4220 Persuasion 3
COMM 4260 Computer-Mediated Communication 3
COMM 4340 African American Rhetoric 3
COMM 4365 African American Family Communication 3
COMM 4800 Independent Study 3
HCAP 3800 Introduction to Public Health 3
HLSC 3050 Health Promotion and Disease Prevention
SOCI 3350 Sociology of Health 3

Theatre Concentration Core: 21-hours
THTR 1110 Stagecraft 3
THTR $2050 \quad$ Production Practicum 1
THTR 2400 Elementary Acting 3
THTR $3000 \quad 3$
THTR 3030 Directing 3
THTR $3050 \quad 3$
THTR $4050 \quad 3$
THTR 4010 Theatre History I 3
THTR $4030 \quad$ Theatre History II 3
Choice of two Theatre tracks (Performance or Production) Performance track (choose 3)
COMM $2620 \quad$ Basic Media Performance 3
THTR $1630 \quad$ Voice for the Actor 3
THTR 2430 Stage Movement 3
THTR $3550 \quad$ Musical Theatre 3
THTR 3720 Acting for the Camera 3
THTR 3730 Intermediate Acting 3
THTR 4200 Advanced Acting 3
THTR $4900 \quad$ Performance Seminar 3
Production track (choose 3)
THTR 2030 Costume and Makeup 3
THTR 2060 Stage Lighting and Sound Design 3
THTR 3700 Stage Management 3
THTR 4000 Drafting for the Theater and Scene Design 3
THTR 4040 Advanced Stagecraft 3
Electives: (Choose 9 hours) *electives may include courses
from the other track as well as below:
THTR $3040 \quad$ Playwriting 3
THTR 3200 Dramatic Theory \& Criticism 3
THTR $3520 \quad 3$
THTR $3540 \quad$ Oral Interpretation
COMM 3580 Reader's Theatre

- 3

COMM 3950 Internship 3
ENGL $4310 \quad$ Shakespeare's Comedies 3
ENGL 4320 Shakespeare's Tragedies 3
COMM 4600
Special Topics
Independent Study
Performance Seminar

ENGL 2110-2230
THTR 1020
Elective

Sophomore Literature Course Appreciation of Drama (minimum grade of C) *Required in Theatre One course from approved list. Typically, MUSC 1010, ART 1010, PHIL 1030 or RELS 2010

Social and Behavioral Science (6-hours)
Elective One course from approved list. 3
Elective One course from approved list.
History (6-hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
HIST 2030 may be taken in place of either HIST 2010 or HIST 2020
*Successful completion of ENGL 1010 and ENGL 1020, with a grade of "C" or better is a prerequisite for HIST 2010/ 2020/
2030.

Natural Science (8 hours)
Elective One course from approved list, with lab 4
Elective One course from approved list, with lab 4
Typically, BIOL 1010, 1011; 1020, 1021; CHEM 1030, 1031;
1040, 1041; ASTR 1010, 1020
Mathematics (3 hours)
Elective One course from approved list.
3
Typically, MATH 1013 or 1110
Orientation (1 hour)
UNIV 1000 Service to Leadership
Total General Education Hours: 42

Electives, Minor, Second Major
In addition to the general education core courses and required major courses, students must take additional courses to make a total of at least 120 semester-hours. These may be electives taken inside or outside of the department, a minor outside the department plus electives, or a second major. A minor or second major is encouraged.
Upper Division Hours
At least 42 of the 120 hours required for graduation must be taken at the junior-senior level - courses numbered in the 3000-4000 range.

## Upper-Division Admission

For admission into the upper-division programs of the Communication major, students must complete all of the requirements listed under the General Education Core. In addition, they must have removed all high school deficiencies, passed all required developmental courses, and earned a cumulative grade point average of at least 2.0 on college-level course work. They must have earned grades of $C$ or better in COMM 1040, (1050 and 1060 for Mass Communications) 2200, and THTR 1020. Students pursuing the B.A. degree must have completed the foreign language requirement before applying for upper-level admission.

Most 3000-4000 level courses in the department are offered only once a year. Therefore, in consultation with an advisor, students will need to plan ahead in order to graduate in a timely fashion.

Minor:
The Department offers a minor in Communication, requiring 18 semester hours. Each area requires 6 hours with 12 elective hours to be taken in consultation with your advisor. Of those 12 elective hours, 6 hours must be upper-level (3000-4000).
A minor with a concentration in Mass Communication includes:
 Technologies and Technique Media
COMM 1060
Fundamentals of Media Writing
+12 hours of electives (6 hours upper level)
A minor with a concentration in Communication Studies includes:

COMM 2100 Fundamentals of Communication 3
COMM 3220 Advanced Public Speaking
+12 hours of electives ( 6 hours upper level)
A minor with a concentration in Theatre includes:
THTR 3520 Modern Drama (3)
Choice of one of the following:

| THTR 2400 or | Elementary Acting | 3 |
| :--- | :--- | :--- |
| THTR 1110 | Stagecraft | 2 |

+12 hours of electives (6 hours upper level)
B.A. Degree: Students pursuing the BA Degree (recommended) must include 12 hours of a single foreign language. It is possible to test out of up to six hours; 120 total hours are still required for graduation.

Suggested Four-Year Plans
Bachelor of Science Degree in Communication Mass Communication (Journalism track)

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR. | SPRING SEMESTER | HR. |
| COMM 1040 | 3 | COMM 1050 | 2 |
| UNIV 1000 | 1 | COMM 1060 | 1 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science I | 4 | Natural Science II | 4 |
| Foreign Language I or Elective | 3 | Foreign Lang. II or Elective | 3 |
|  |  | MATH 1013 or 1110 | 3 |
|  | 14 |  | 16 |

*Successful completion of ENGL 1010 and ENGL1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030.

SOPHOMORE YEAR

| FALI SEMESTER | HR | SPRING SEMESTER | HR |
| :---: | :---: | :---: | :---: |
| COMM 2400 | 3 | THTR 1020 | R |
| COMM 2640 | 3 | ART 1010, ${ }^{\text {a }}$ | 3 |
|  |  | PHIL 2010, or RELS 2010 |  |
| COMM 2200 | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | Social/Behavior | 3 |
|  |  | Science II |  |
| Social/Behavior | 3 | ENGL II Soph. | 3 |
| Science I |  | Literature |  |
| Foreign Language | 3 | Foreign Language IV | 3 |
| III or Elective |  | or Elective |  |
|  | 18 |  | 18 |
|  | JUNI | NIOR YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 3800 | 3 | COMM 4050 | 3 |
| COMM 3300 | 3 | COMM Elective | 3 |
| COMM 3400 | 3 | COMM 3950 | 3 |
| 3000-4000 Electives | 9 | 3000-4000 Electives | 6 |
|  | 15 |  | 15 |
|  | SEN | IIOR YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4350 or 4360 | 3 | COMM 4500 or 4510 | 3 |
| 3000-4000 Electives | 6 | 3000-4000 electives | 3 |
| COMM 3520 | 3 | Any electives | 6 |
|  | 12 |  | 12 |

Mass Communication (Film \& Television Production track)

FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| COMM 1040 | 3 | COMM 1050 | 2 |
| UNIV 1000 | 1 | COMM 1060 | 1 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science I | 4 | Natural Science II | 4 |
| Foreign Language I or   <br> Elective 3 MATH 1013 or 1110 | 3 |  |  |
|  | Foreign Language II <br> or Elective |  |  |
|  |  | 3 |  |

*Successful completion of ENGL 1010 and ENGL 1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030.

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR S | SPRING SEMESTER | HR |
| COMM 2500 | 3 T | THTR 1020 | 3 |
| COMM 2640 | 3 P | ART 1010, MUSC 1010, PHIL 2010 or RELS 2010 | 3 |
| COMM 2200 | 3 H | HIST 2020 | 3 |
| HIST 2010 | 3 S | SOC/BEH/SCI. II | 3 |
| SOC/BEH/SCI. I | 3 E | (Soph. Literature) | 3 |
| Foreign Lang. III or Elective | 3 F | Foreign Lang. IV or Elective | 3 |
|  | 18 |  | 18 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 3520 | 3 | COMM 4340 | 3 |
| COMM 3240 | 3 | COMM 2600 | 3 |
| COMM 3440 | 3 | COMM 3950 | 3 |
| 3000-4000 Electives | 6 | 3000-4000 electives | 6 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4550 | 3 | COMM 4500 or 4510 | 3 |
| 3000-4000 electives | 6 | 3000-4000 electives | 3 |
| Any Elective | 3 | Any electives | 6 |
|  | 12 |  | 12 |

Mass Communication
(Integrated Marketing Communication track)

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| COMM 1040 | 3 | COMM 1050 | 2 |
| UNIV 1000 | 1 | COMM 1060 | 1 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science I | 4 | Natural Science II | 4 |
| Foreign Language I or | 3 | MATH 1013 or 1110 | 3 |
| Elective |  | Foreign Language II or | 3 |
|  | Elective | 16 |  |

*Successful completion of ENGL 1010 and ENGL 1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030.

|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 2500 | 3 | THTR 1020 | 3 |
| COMM 2640 | 3 | ART 1010, MUSC 1010, | 3 |
| COMM 2200 | 3 | PHIL 2010, or RELS 2010 |  |
| HIST 2010 | 3 | HIST 2020 | 3 |
| SOC/BEH SCI I | 3 | SOC/BEH SCI II | 3 |
| Foreign Lang. III or | 3 | ENGL II (Soph. Lit.) | 3 |
| Elective | Foreign Lang. IV or <br>  <br>  |  |  |
|  | 18 |  | 3 |
|  |  | 18 |  |


| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 2600 | 3 | COMM 4460 | 3 |
| COMM 4380 | 3 | COMM elective | 3 |
| COMM elective | 3 | COMM 3950 | 3 |
| 3000-4000 Electives | 6 | 3000-4000 electives | 6 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4400 | 3 | COMM 4500 or 4510 | 3 |
| 3000-4000 Electives | 6 | COMM 4480 | 3 |
| COMM 3520 | 3 | 3000-4000 Electives | 3 |
|  |  | Any Electives | 3 |
|  | 12 |  | 12 |

*Successful completion of ENGL 1010 and ENGL 1020, with a grade
of "C" or better is a prerequisite for HIST 2010/2020/2030.

| SOPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Foreign Language III or Elective | 3 | ART 1010, MUSC 1010, <br> PHIL 1030, or RELS 2010 | 3 |
| COMM 2300 | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | SOC/BEH/SCI II | 3 |
| SOC/BEH/SCI I | 3 | ENGL II (Soph. Lit.) | 3 |
| COMM 3100 | 3 | COMM 3150 | 3 |
|  |  | Foreign Language IV or Elective | 3 |
|  | 15 |  | 18 |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 3330 | 3 | COMM 3370 | 3 |
| Elective 3000-4000 Leve | l 9 | COMM 4310 | 3 |
| COMM 4300 | 3 | 3000-4000 electives | 9 |
|  | 15 |  | 15 |
|  | SENIOR | YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4210 | 3 | COMM 4500 or 4510 | 3 |
| COMM 4340 | 3 | COMM 4250 | 3 |
| Elective 3000-4000 | 6 | Any Electives | 6 |
|  |  | Elective 3000-4000 Level | 3 |
|  | 12 |  | 12 |

Successful completion of ENGL 1010 and ENGL1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030.

## SOPHOMORE YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| COMM 2500 | 3 | THTR 1020 | 3 |
| COMM 2640 | 3 | ART 1010,MUSC 1010, | 3 |
| COMM 2200 | 3 | PHIL 2010, or RELS 2010 |  |
| HIST 2020 | 3 |  |  |
| SOC/BEH/SCI I   <br> Foreign Lang. III <br> or Elective 3 SOC/BEH/SCI II | 3 |  |  |
|  | 3 | ENGL II (Soph. Lit.) <br> Foreign Lang. IV <br> or Elective | 3 |
|  | 18 |  | 3 |
|  |  | 18 |  |


|  | JUNIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM Elective | 3 | COMM Elective | 3 |
| COMM 4380 | 3 | COMM Elective | 3 |
| COMM Elective | 3 | COMM 3950 | 3 |
| 3000-4000 Electives | 6 | 3000-4000 Electives | 6 |
|  | 15 |  | 15 |
|  | SENIOR YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4400 | 3 | COMM 4500 or 4510 | 3 |
| 3000-4000 Electives | 6 | COMM 4480 | 3 |
| COMM 3520 | 3 | 3000-4000 Electives | 3 |
|  |  | Any Electives | $\frac{3}{12}$ |
|  |  | 12 |  |

Communication Studies
(Intercultural Communication track)

## FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :---: | :---: | :---: | :---: |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | Natural Science II | 4 |
| COMM 2100 | 3 | COMM 2200 | 3 |
| Natural Science I | 4 | THTR 1020 or (other Gen Ed) | 3 |
| Any Electives or Lang. | 3 | MATH 1013 or 1110 | 3 |

Communications Studies (Health Communication track)

FRESHMAN YEAR

|  | FALL SEMESTER | HR | SPRING SEMESTER |
| :--- | :---: | :--- | :---: |
| UNIV 1000 | 1 | ENGL 1020 | HR |
| ENGL 1010 | 3 | Natural Science II | 3 |
| COMM 2100 | 3 | COMM 2200 | 4 |
| Natural Science I | 4 | THTR 1020 | 3 |
| Any Electives or Lang. | 3 | MATH 1013 or 1110 | 3 |
|  |  |  | 3 |

*Successful completion of ENGL 1010 and ENGL 1020, with a grade of " $C$ " or better is a prerequisite for HIST 2010/2020/2030.

| OPHOMORE YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR SP | PRING SEMESTER | HR |
| Foreign Language III or Elective | $\begin{array}{ll} 3 & \mathrm{Ar} \\ \mathrm{Pl} \end{array}$ | 1010, MUSC 1010, <br> HIL 1030, or RELS 2010 | 3 |
| COMM 2300 | 3 HI | ST 2020 | 3 |
| HIST 2010 | 3 S | OC/BEH/SCI II | 3 |
| SOC/BEH/SCI I | 3 EN | NGL II (Soph. Lit.) | 3 |
| COMM 3100 | 3 C | OMM 3150 | 3 |
|  |  | reign Lang. IV or ective | 3 |
|  | 15 |  | 18 |
|  | JUNIOR | YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 3340 | 3 | COMM 4230 | 3 |
| Elective 3000-4000 leve | l 9 | Any Elective | 3 |
| Any Elective | 3 | 3000-4000 Electives | 9 |
|  | 15 |  | 15 |
|  | SENIOR | YEAR |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| COMM 4240 |  | COMM 4500 or 4510 | 3 |
| COMM 4255 or 4300 | 3 | COMM 4250 | 3 |
| Elective 3000-4000 |  | Any Electives | 3 |
| Level |  | Elective 3000-4000 | 3 |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Level |  |  |  |
| Theatre (Performance track) |  |  |  |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 |  | ENGL 1020 | 3 |
| ENGL 1010 | 3 | Natural Science II | 4 |
| MATH 1013 or 1110 | 3 | COMM 2200 | 3 |
| Natural Science I | 4 | THTR 1020 | 3 |
| Any Electives | 4 | Elective | 3 |
|  | 15 |  | 16 |
| *Successful completion of ENGL 1010 and ENGL 1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030. |  |  |  |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR SP | PRRING SEMESTER | HR |
| Sophomore Lit. | 3 AP | RT 1010, MUSC 1010, | 3 |
| Elective | 3 PH | HIL 1030, or RELS 2010 |  |
| HIST 2010 | 3 HI | IST 2020 | 3 |
| SOC/BEH/SCI I | 3 S | OC/BEH/SCI II | 3 |
| THTR 1110 | 3 TH | HTR 2400 | 3 |
|  |  | lective | 3 |
| 15 |  |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| THTR 3000 |  | THTR 4000 | 3 |
| THTR 3040 | 3 | SPTH 3050 | 3 |
| THTR 3520 | 3 | COMM 3540 | 3 |
| THTR 4010 | 3 | Any Electives | 6 |
| Any Elective | 3 |  |  |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| THTR 4020 | 3 | THTR 3030 | 3 |
| THTR 4030 |  | THTR 4900 | 3 |
| COMM 4500 | 3 | Any Electives | 9 |
| Electives 3000-4000 | 6 |  |  |
|  | 15 |  | 15 |
| THEATRE (Production track) |  |  |  |
| FRESHMAN YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | Natural Science II | 4 |
| MATH 1013 or 1110 | 3 | COMM 2200 | 3 |
| Natural Science I | 4 | THTR 1020 | 3 |
| Any Electives | 4 | Elective | 3 |
| 15 16 |  |  |  |

*Successful completion of ENGL 1020, with a grade of "C" or better is a prerequisite for HIST 2010/2020/2030.

| SOPHOMORE YEAR |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER |  | HR |
| Sophomore Lit. | PHIL 1030 or RELS2010 |  |  |  |
| Elective | 3 | HIST 2020 |  | 3 |
| HIST 2010 | 3 | SOC/BEH/SCI II |  | 3 |
| SOC/BEH/SCI I | 3 | THTR 2400 |  | 3 |
| THTR 1110 | 3 | Elective |  | 3 |
|  | 15 |  |  | 15 |
|  | JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |  |
| THTR 3000 | 3 | THTR 4000 | 3 |  |
| THTR 3040 | 3 | SPTH 3050 | 3 |  |
| THTR 3520 | 3 | COMM 3540 | 3 |  |


| 3 <br> 3 | Any Electives |
| :--- | :---: |
| 15 | 6 |
|  |  |

*Successful completion of ENGL 1010 and ENGL 1020, with a grade of " $C$ " or better is a prerequisite for HIST 2010/2020/2030.

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| THTR 4020 | 3 | THTR 3030 | 3 |
| THTR 4030 | 3 | THTR 4900 | 3 |
| COMM 4500 | 3 | Any Electives | 9 |
| Electives 3000-4000 | 6 |  |  |
| Level |  |  | 15 |

## Course Descriptions <br> Communications (COMM)

Prerequisite to all upper-division ( 3000 or 4000 Lev.) Communications (COMM) courses without stated prerequisites: COMM 1040, COMM 2200, THTR 1020.

COMM 1040 Introduction to Mass Communication (3). A survey of the mass media and their impact on the ideas, attitudes, and impressions of society.

COMM 1050 Technologies and Techniques of Digital Media (2) Students are introduced to foundational techniques and technologies, including field-specific computer software, digital file and asset management, Web content and publishing platforms, basic audio and video equipment controls and operation. Students gain practical experience participating in journalism, audio, and video productions.

COMM 1060 Fundamentals of Media Writing (1) Introduction to print and broadcast news writing with emphasis on style and structure. Prerequisite: ENG 1010 and 1020 In our 4-year paradigm, we have this course in the same semester as ENGL 1020.

COMM 2100 Fundamentals of Communication (3). Introduction to the various types of speech communication, including interpersonal, small group, and non-verbal communication process.

COMM 2200 Public Speaking (3). Principles of speech composition and delivery with emphasis on preparing and presenting the various forms of oral communication. *This course satisfies the University general education core oral communication requirement
COMM 2202 Honors Public Speaking (3). Honors section of COMM 2200. Enrollment limited to students in University Honors Program.

COMM 2300 Business and Professional Speech Communication (3). Designed specifically for the student with neither a major nor a minor in the field of speech. Emphasis is placed on the following speech situations: business interviews, conferences, reports, and similar types of business communications.
COMM 2350 Copywriting (3). This course focuses on developing skills in writing copy for a variety of marketing communication uses and learning the step-by-step creative process of writing based on sound strategy and objectives. Pre-requisite: COMM 1040 Intro to Mass Communication.

COMM 2400 Newswriting (3). Introduction to reporting techniques, with emphasis on news writing. Prerequisite: COMM 1040, 1060.
COMM 2500 Electronic Media Writing (3). A study of the techniques and methods used in writing radio and television scripts. Students are required to write a number of scripts for various types of programs. Prerequisite: СОMM 1040.

COMM 2510 Graphic Design I (3). Technique of letter indication, finished lettering, letter design, typography and film lettering, usage, and adaptation of lettering skills to practical problems. Same as ART 2510

COMM 2600 Process and Effects of the Media (3). Study of the electronic media's development, economics, regulation, social impact, digital technology, industry practices in print, online, radio, television, cable, satellite, nonbroadcast communication systems, and new media. Prerequisite: COMM 1040.
COMM 2620 Basic Media Performance (3). A course covering all types of non-dramatic broadcast performance, with practical application in a laboratory situation.

COMM 2640 Digital Media Production (3). An introductory course dealing with the basic principles of directing and producing radio and television programs. Practical application in a laboratory situation. Prerequisite: COMM 1040, COMM 1050.

COMM 2800 Race, Gender, Class in Global Media (3). COMM 2800 is an introduction to a variety of issues related to gender, race, and class in the mass media. The course will familiarize students with the breadth of race, class and gender issues while at the same time providing tools to critically analyze and engage modern global media and mediums. Pre-requisite: COMM 1040 Intro to Mass Communication.

COMM 3000 Media Careers (2). An introductory course exploring "the real world" of mass communications through a combination of guest speakers and field trips. The class visits stations, production facilities, and publications, and hears a variety of working mass communication professionals.
COMM 3100 Communication Theory (3). A critical survey of social science based communication theories; an examination of the nature, processes and functions of communication theory in a variety of contexts. Prerequisite: COMM 2100 Fundamentals of Communication, COMM 2200 Public Speaking (with a grade of "C" or better).

COMM 3130 Screenwriting (3) Screenwriting is a course focused on developing skills to write a narrative film screenplay. This includes learning screenplay format, story structure, storytelling techniques, character development and plot. The course requires reading and analyzing scripts, giving script feedback through writing a script coverage, as well as writing original and adapted screenplays. Scripts from this course will be used for potential COMM 4510 Senior Seminar Production courses or COMM 4150 Field Video courses for production projects.

COMM 3140 Visual Storytelling (3) Visual Storytelling is an intermediate level course focusing on narrative and documentary storytelling skills. Emphasis is on Cinematography, Lighting, and Audio. This course contains several hands on projects for practicum and lectures that stress film language theory. Prerequisite: COMM 2640 Digital Media Production.
COMM 3150 Communication Research Methods (3). This course introduces students to the research methods scholars and communication professionals use to study the human communication process. Major course topics include the philosophy of scientific research, fundamental considerations in the design of quantitative and qualitative studies (measurement \& sampling), methods for gathering qualitative and quantitative data (focus group interviews, experiments, surveys \& content analyses) and basic methods for analyzing quantitative and qualitative data. Prerequisite: ENGL 1020 and junior or senior standing.
COMM 3160 Integrated Marketing Communications (3). This course is designed to provide an overview of integrated marketing communications. It will cover the additional use of emerging media, as well as database techniques to establish competitive advantage. Prerequisite: COMM 1040 Introduction to Mass Communication.

COMM 3200 Argumentation and Debate (3). Principles and practices of argumentation, analysis of propositions and evidence, brief-making, and preparation and delivery of forensics, as well as participation in classroom discussions. Techniques governing roundtable, forum, and panel discussions are studied.
COMM 3220 Advanced Public Speaking (3). Study of standards of criticism and techniques involved in effective public address. Prerequisite: COMM 2200.
COMM 3240 Audio Production (3). A course which provides the student with experience in audio production techniques, with emphasis on creative use of audio and audio documentary production. Aspects of news and public affairs production are covered in conjunction with production assignments at the campus radio station. Prerequisite: COMM 2640.
COMM 3300 Print/On-line News Reporting 1 (3) Introduction to online and convergence news writing with emphasis on style and structure for print and multimedia products. Prerequisite: COMM 2400

COMM 3330 Gender Communication (3). Examines the influence of gender plays on a number of communication contexts such as romantic relationship, family communication, workplace relationships, and media representation.

COMM 3335 Sales Promotion (3). This course explores the role, function, planning and implementation of sales promotion in the Integrated Marketing Communication process and how it is coordinated with advertising, public relations, direct and interactive marketing. Topics include: incentive programs, refunds, couponing, contests, cooperative advertising, trade-oriented sales promotion, customer-oriented sales promotions, social marketing channels, and the growing power of retailers. Prerequisite: COMM 3160

COMM 3340 Health Communication (3). Introduction to theory, research, and principles of communication in healthcare industries, public policy, and individual care with special attention to cultural, ethnic, and gender factors.
COMM 3370 Media \& Culture (3). This course introduces and explores cultural approaches to media studies, with a focus on major theories and critical analysis of media and popular culture. Topics include: cultural theory; aesthetics and taste; representation and ideology; consumer culture; media, culture and identity.

COMM 3400 Radio News Reporting (3) Course in writing, editing, announcing and producing radio news reports. Producing, anchoring and reporting for the student radio newscasts on WTST is required. Prerequisite: COMM 2400, 2640

COMM 3440 Video Studio Production (3) In-depth discussion and experience in the techniques of video/television multicamera studio production, including studio directing of program types such as demonstrations, talk shows, and news. Course includes extensive instudio practice. Prerequisite: COMM 2640.
COMM 3520 Communication Law and Ethics (3). Analysis of law and regulation in terms of the social, political, and economic interests they are designed to protect and in terms of their impact on the communication industry. The First Amendment, rights of privacy, and communication ethics are considered. Prerequisite: COMM 2600 or permission of instructor.
COMM 3540 Oral Interpretation (3). Understanding of and appreciation for literature through the oral re-creation or performance of poetry, prose, and drama.
COMM 3550 Producing Digital Media (3). Producing Digital Media is designed to prepare students to work through the organizational, planning, budgeting and finishing of producing digital content for film, television, marketing campaigns, and website development. Taking a hands on approach students will prepare schedules, do script analysis, budgets and study distribution options as it relates to the variety of digital media content options.
COMM 3560 Forensics Practicum (3). Practical experience through active class participation in individual events and performance activities. May be taken twice for a total of six credit hours. Prerequisite: COMM 2200

COMM 3580 Readers' Theatre (3). Group interpretation performances of compiled scripts from the genres of poetic, prose, and dramatic literature. Choral speaking, chamber theatre, group interpretation, and interpreter's theatre are emphasized. Prerequisite: COMM 3540.

COMM 3610 Basic Audio (Recording) Studio (3). Practical experience in the recording studio and the study of basics, including rudimentary physics of sound, function of basic equipment, principles of microphone placement, and mixing down. Prerequisite: COMM 2640, 3240 Same as MUSC 3610
COMM 3615 Live Sound Reinforcement (3). Examination and application of current technologies and techniques involved in modern sound reinforcement. Topics include types of venues, and audio systems. Field work required. Pre-requisite: COMM 3610 Basic Studio

COMM 3620 Advanced Media Performance (3) The course is designed to enhance the performance talents of those who wish to become news anchors, reporters, sportscasters, interview or talk show hosts and more. Convincing, capable "on-air" communication utilizing WTST campus radio and the television studio is the aim of the course. The student will accomplish this goal via performance projects and evaluation. Prerequisite: COMM 2620

COMM 3750 Entertainment Program Production (3). This course will provide hands-on production experience in producing entertainment programming for TV and Internet use as well as marketing promotion for entertainment programming. Prerequisite: COMM 3440.
COMM 3800 TV News Reporting (3). Preparation and production of news and documentaries for television. Broadcast newswriting style, use of audio, video, and graphics, and newscast production are among the topics covered. Prerequisites: COMM 2400 and COMM 2640 , or permission of instructor.

COMM 3910 Communication Laboratory (1). A practicum course involving work at the campus media outlets. Students undertake a variety of media responsibilities under the supervision of the media manager. Students may choose from the following sections: 01-Radio; 02-Radio News; 03-TV News; 04 TV Program Production; 05 The Meter; 06 TSU NewsNetwork.com, 07 Advertising Practicum. Prerequisite: COMM 1050, COMM 2640 or permission of instructor. May be taken three times for credit.

COMM 3950 Internship (3). Internship program between TSU and local media, communications, and theatre agencies, in which students undertake various duties. Specific internships available change from semester to semester. Open to students in all areas of the Department. May be taken once for credit within the 48 hour major requirement (in Mass Comm), may be taken for additional credit if only above the 120 hours needed to graduate-may be taken for a total of three times. Prerequisites: introductory courses in area related to internship (COMM 2600 and COMM 2640 for electronic media, COMM 2400 for journalism, and two junior-senior-level courses in the area of internship for students in other areas of the Department) and permission of instructor. Students must have place of intern employment approved by instructor or department Chair.

COMM 4050 News Editing (3). Editing copy, writing headlines, designing newspaper layout. Prerequisite: COMM 2400.

COMM 4060 Investigative Reporting (3). Special problems and assignments in in-depth investigative reporting. Prerequisite: Choose one of the following: COMM 3300, 3400 or 3800.
COMM 4080 Sports Journalism (3). The aim of this course is to develop skills in writing, editing, reporting, announcing, and interviewing in the production of multimedia sports reports, sports talk and play-by-play/color commentary. In this course students will learn to gather, edit and report information at the various campus media. A professional resume disk will result from coursework.

COMM 4090 Sports Production (3). This course will provide hands-on production experience in producing sporting events and sports packages for TV, radio and Internet use. Students will be required to crew all TSU home football and/or basketball games. (Prerequisite: COMM 2640).

COMM 4100 Editorial Writing (3). Critical analysis of structure and content of newspaper editorials. Course also includes practice in writing editorials and columns.

COMM 4150 Visual Storytelling II (3) Building on skills learned in prior production classes, this course provides students with theory and intensive experience in single-camera, on-location video production and editing. Students work in teams to complete at least three major production projects, including pre-production, production, and postproduction phases. Finished projects are expected to be of portfolio quality. Prerequisite: COMM 2640, COMM 3140

COMM 4210 Small Group Communication (3). Communication in small groups, emphasizing principles, practices, and patterns in practical situations.

COMM 4220 Persuasion (3). Psychology of attitude formation and change, including theories of persuasion and principles of persuasive communication. Prerequisite: COMM 2200.

COMM 4245 Health Communication Campaigns (3) Focuses on the step by step design, implementation, evaluation, and critique of health communication programs designed to change behavior. Students create actual mini-campaigns and use the simulation SCOPE to develop these hypothetical campaigns. Prerequisites: COMM 3340 Health Communication

COMM 4230 Organizational Communication (3). The study of the communication process within organizational settings. Examines the role of communication in establishing and maintaining organizational climates, systems, cultures. Other issues include power dynamics, ethics, and conflict management in organizations. Prerequisite: COMM 2200 Public Speaking or COMM 2100 Introduction to Speech Communication

COMM 4250 Leadership Communication (3). This course introduces the communication concepts that are central to effective leadership. Additionally, this course focuses on developing a strengths-based approach to leadership and learning to use various communication styles to become a more effective leader.

COMM 4255 Crisis Communication (3). This course provides students with a fundamental understanding of crisis management, risk communication, media relations, and public-opinion research techniques in multiple contexts. Students will work as team to develop and implement a communication plan to address a crisis.

COMM 4260 Computer-Mediated Communication (3). Survey of various genres of human communication facilitated by or mediated through information technology. Examines the interpersonal, ethical, social-cultural implications of these developments with special focus on digital divide, class, identity politics, privacy, and censorship.

COMM 4300 Interpersonal Communication (3). Basic psychological factors and their relation to the various types of communicative processes, with emphasis on interpersonal relationships.

COMM 4320 Intercultural Communication (3). Understanding dimensions of communication that apply across cultural boundaries. Emphasis is placed on both theoretical and practical awareness of communication in and between cultures.

COMM 4340 African American Rhetoric (3). A study of selected speeches of contemporary black leaders who have contributed to and made an impact on American life. The speeches are analyzed according to the principles of rhetoric, based on Aristotelian standards. Prerequisite: COMM 2200.

COMM 4345 Race, Power \& Communication (3). This course provides a close examination of how race and ethnic as a social category is constructed and enacted through day-to-day communication behaviors. Includes how race and race relations are portrayed and imagined in popular discourse.

COMM 4350 Radio-TV News II (3) Advanced course in writing, editing, announcing and producing radio and television news reports. Producing, anchoring and reporting for the student television and radio newscasts is required. Students also analyze the job market and produce a resume disk for employment. Prerequisites: COMM 3400, 3800

COMM 4360 Print-Online News II (3) An advanced course that focuses on news writing with emphasis on style and structure for print and multimedia products. The course also provides training in using the appropriate computer and editing equipment to successfully post graphics, photos, and other information to web publishing templates. Prerequisite: COMM 3300.

COMM 4365 African American Family Communication (3). This course is an examination of African American family communication from a holistic perspective incorporating the impact of the historical, sociological, psychological, and religious viewpoints on family structure and functioning and the role of communication in addressing issues within the family.

COMM 4370 African American Relational Communication (3). This course provides an examination of interpersonal communication within African American romantic relationships from a holistic perspective. Additionally, the historical, sociological, and psychological factors that affect individual behaviors and communication choices within these relationships including gender socialization from Africa to America will be examined.

COMM 4380 Media Leadership \& Entrepreneurship (3). A course covering legal, social, programming, and economic aspects of radio and television management. Guest lectures by local station managers and department chairs are an important feature of the course. Prerequisite: COMM 2600 or permission of instructor.
COMM 4400 Programming (3). A consideration of television and radio programming in terms of content, social impact, and artistic merit. News, documentaries, public affairs, talk shows, light entertainment, serious drama, and advertisements, as well as program schedules as a whole, are analyzed. Prerequisite: COMM 2600 or permission of instructor.

COMM 4415 Feature Writing (3). Instruction and practice in writing feature articles. Prerequisite: COMM 2400 or permission of instructor. This course is designed to provide a comprehensive look at message strategy and its role in the integrated marketing communications process. It will focus on the theoretical basis of creativity in print advertising, broadcast advertising, Internet and interactive marketing and direct marketing. Prerequisite: COMM 1040 Introduction to Mass Communication.

COMM 4450 Entrepreneurship in the Arts (3). An examination of how arts professions and arts economies operate and evolve, as well as how they interact within the larger economy. Students explore opportunities in smaller economic settings. Major project includes designing and executing an entrepreneurial project. Elective course for COMM majors. Pre-requisite: COMM 3520 COMM Law

COMM 4460 Creative Advertising Strategies (3). Basic print and broadcast advertising techniques, including ideas and their translations into persuasive words and pictures. Sales practices, for both print space and broadcast time, and the structure and function of advertising agencies are also covered.

COMM 4480 Principles of Public Relations (3). History, development, scope, and role of public relations in society. Course covers the processes and practices of public relations, emphasizing the use of mass communications in the field. Prerequisites: COMM 1040, COMM 2400.

COMM 4500 Senior Project (3). Completion of individual research or project through application of the research methodology process. Required of all Departmental majors. Mass Communication majors must take either COMM 4500 or 4510

COMM 4510 Senior Seminar: Multimedia (News Capstone) or Production capstone (3) Advanced course combining previously taught skills in print, radio and television journalism into the emerging area of multi-media/on-line journalism (news) or its senior-level equivalent in production. Students are expected to produce portfolio quality work. Prerequisites: (News) Choose one of the following: COMM 3300, 3400 or 3800. Production prerequisites: See advisor.

COMM 4530 Reviewing and Criticism (3). Instruction and practice in reviewing entertainment and the arts. Emphasis on film criticism and one or more or the following: theatre, literature, music, dance, art. Prerequisite: COMM 2400. *Course not regularly offered, see advisor for options.

COMM 4550 Audio/Video Post Production (3) Provides students with intensive experience in the craft and art of audio and video post production at an advanced level. Topics include audio sweetening and post-production effects. Theoretical and practical consideration of communication and artistic issues. Intensive hands-on laboratory and practical experience. Prerequisite: COMM 2640.

COMM 4580 Advanced Public Relations (3). Practical exercises in public relations, stressing campaigns, schedules, budgets, and media strategies. Prerequisite: COMM 4480.

COMM 4600 Special Topics (3). Scope of subject matter to be determined by instructor. May be taken twice for up to six hours of credit if different topic. Prerequisite: Permission of instructor.

COMM 4610 Advanced Audio Studio (3) Continuation of studio experience, with emphasis on advanced mixing recording sound. Students acquire skills in addressing recording problems and in evaluating results of recording and mixing efforts. Prerequisite: COMM 3610 Same as MUSC 4610

COMM 4615 Audio for Video (3) Examines the theories, technology, practices, and art used in the creation of custom music and sound effects and incorporation into modern film and video media in a postproduction setting. Course is taught in a lecture/lab format. Prerequisite: COMM 4610 Same as MUSC 4615

COMM 4800 Independent Study (3). Individual study and research under faculty guidance. May be taken twice for up to six hours of credit.

COMM 4850 Communications Practicum (6-12). A practicum or internship experience requiring the student to work on-site for more than a three credit hour experience. Students may not enroll without advisor approval. Students may receive up to 12 hours of credit for the internship/practicum. Only 3 hours, however, may be counted toward the requirements for a major in Communications. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level Communications courses.

## Theatre (THTR)

Prerequisite to all upper-division (3000 or 4000 level) Theatre courses without stated prerequisites: THTR 1110 and THTR 1020.

THTR 1010 Introduction to Drama (3). Elements of theory and practical experience in the drama, through study of representative plays and dramatic theory, as well as a study of theatre operations, from working backstage to observing and critiquing plays, to theatrical field trips. This course may be taken to remove high school deficiency in the visual and performing arts. If it is used for this purpose, it does not yield degree credit.
THTR 1020 Appreciation of Drama (3). Introduction to dramatic principles though the study of major periods and representative plays from the Greek period to the present. Course may be used toward satisfying University humanities requirement. Course is required for THTR majors with a grade of "C" or better.

THTR 1021 Honors Appreciation of Drama (2). Honors section of THTR 1020. Enrollment limited to students in University Honors Program. Course may be used toward satisfying University humanities requirement.

THTR 1110 Stagecraft (3). Introduction to theatre technology utilizing lecture and lab. Topics include set construction, lighting, sound, and makeup. Students will participate in the construction of the Department's theatrical productions. Lecture/Laboratory experience.

THTR 1630 Voice for the Actor (3): A comprehensive study of the practical application of vocal technique for stage acting. Offers instruction and practice designed to aid the actor in achieving optimum
vocal performance through exploration of vocal techniques and proper breathing, projection, resonance, articulation, and characterization. Basic dialects and textural performance techniques are introduced.

THTR 2030 Costume and Makeup (3): Principles and theories of costume design and techniques of makeup for theatrical productions are explored. Develop skills of script analysis, sketching, fabric study and rendering for conceptualization and communication of design ideas. Practical execution of stage makeup for theater, film and TV. Students are required to purchase supplies. Prerequisite: THTR 1110.

THTR 2050 Production Practicum (1): Students will be assigned a crew position for one of the department's theatre productions. This can include marketing, box office/audience development, lights, sound, costumes/ makeup or scenery. Theatre majors must take three semesters of Production Practicum, THTR 2050, 3050, 4050, in sequence. Prerequisite: THTR 1110.

THTR 2060 Stage Lighting and Sound (3). Introduction to theory and practice in stage lighting and sound. Students study the methods and techniques of lighting and sound production and design used in the theatre. Tools and techniques of lighting and audio production are used in laboratory recording and mixdown. Prerequisites: THTR 1110, 2050.

THTR 2400 Elementary Acting (3). Study and practice in the fundamentals of acting technique based on play and character analysis. The importance of voice, posture, gesture, and movement in theatrical expressiveness are emphasized, using speeches and short scenes from the world's best dramas.

THTR 2430 Stage Movement and Dance (3): Use of the body and bodily movement for characterization and general stage movements. Exercises, dance, and improvisations are emphasized in examining body dynamics for contemporary and classical acting and movement styles.
THTR 3000 Play Production (3). Study of the major components in producing a play: directing, acting, scenery and lighting, sound, costuming and make up, selecting a play, casting, theatre business, and stage management. Emphasis is also placed on the collaborative and managerial skills necessary for artistic production.

THTR 3030 Directing (3). Analyzing scripts and directing one-act plays, with attention to casting, blocking, and rehearsal styles through practicum. Prerequisites: THTR 2400 and 3000.

THTR 3040 Playwriting (3). Theory and practice of writing one-act plays for the stage. Prerequisite: THTR 3520.

THTR 3050 Production Practicum (1): Students will be assigned crew positions for one of the department's theatre productions. This can include marketing, box office/audience development, lights, sound, costumes/ makeup or scenery. Theatre majors must take three semesters of Production Practicum, THTR 2050, 3050, 4050, in sequence. Prerequisite: THTR 1110, 2050.

THTR 3200 Dramatic Theory and Criticism A survey of the major critical theories that inform world theatrical tradition from Aristotle to Boal. The course furnishes the student with the basic tools of criticism to study drama both as literature and as stage performance. Selected plays will be studied for their thematic, structural and aesthetic components. Prerequisite: THTR 1020.

THTR 3410 Children's Theatre I (3). Development of more sensitive characterizations and increased awareness of such demands of a drama as structure, pace, mood, and tension. The same process may be used as a teaching tool in other areas, such as the language arts program in elementary and secondary schools. The course is taught in a laboratory situation. *Course not regularly offered, see advisor for options.

THTR 3420 Children's Theatre II (3). Fundamental principles of crew and committee work for a children's play, taught by the student's actual participation in some phase of the productions, such as cast member, crew member, or committee member. Cast members may include people from the third grade through graduate level. *Course not regularly offered, see advisor for options.

THTR 3520 Modern Drama (3). Extensive study of world-famous plays from 1880"s to the present day. Readings and reports.

THTR 3550 Musical Theater (3): This course is designed to give students an overview of the major aspects of musical theatre through a combination of seminar and workshop formats. The course emphasizes an understanding of musical theatre through a survey of the history of the American musical, genres, performance and production requirements, techniques, and opportunities.

Prerequisites: THTR 2400 (for THTR students) and MUSC 1401 (for MUSC students); or consent of instructor.

THTR 3700 Stage Management (3): This course will be divided into the segments of pre-production, rehearsal period, tech/running, and maintenance of a production. The emphasis will be on management practices for theatre in all types of venues including Actors Equity. There will be an element of the practical, day-to-day "nuts and bolts" in the stage management process. Prerequisite: THTR 1110, 2050.

THTR 3720 Acting for the Camera (3): Instruction and practice in the basics of acting adjustments for both TV and film style productions. Content consists of actor/director relationship, the relationship between performer and camera, casting, blocking for the camera, and scene analysis. Prerequisite: THTR 2400 or consent of instructor.

THTR 3730 Intermediate Acting (3): Concentration of in-depth study of skills introduced in Elementary Acting. Continuation of character development with emphasis on scene study. Prerequisite: THTR 2400 or consent of instructor.

THTR 4000 Drafting for the Theater and Scene Design (3). Theory and principles of scenic design and drafting for stage are the focus. Conceptualization and communication of design ideas are explored through renderings, ground plans and elevations via drafting with computer and by hand. Students are required to purchase supplies. Prerequisite: THTR 1110, 2050, 2060, 3050.

THTR 4010 Theatre History I (3): An examination of theatre's historical moments along with the theories and terminology applicable to discussions on theatre from the Egyptians to the Restoration Period. Prerequisite: THTR 1020.

THTR 4020 Stage Lighting and Make-up (3). Advanced make-up and lighting practicum in major productions and laboratory productions. Prerequisites: THTR 1110; THTR 1020.

THTR 4030 Theatre History II (3): An examination of theatre's historical moments along with the theories and terminology applicable to discussions on theatre from the Restoration through the present. Prerequisite: THTR 1020.

THTR 4040 Advanced Stagecraft (3). Advanced techniques of the technical process of theatre operation before, during and after a production. It will address construction, lighting, sound, rigging and running of a production. Prerequisites: THTR 1110, 2050, 3050.

THTR 4050 Production Practicum (1): Students will be assigned a crew position for one of the department's theatre productions. This can include marketing, box office/audience development, lights, sound, costumes/ makeup or scenic. Theatre majors must take three semesters of Production Practicum, THTR 2050, 3050, 4050, in sequence. Prerequisite: THTR 1110, 2050, 3050.

THTR 4200 Advanced Acting (3): Provides training in the performance of character roles from various dramatic periods and genres from classical to modern and contemporary. Special attention is paid to the philosophical and social context of each period or school as well as the particular vocalization, movement, characterization and staging demands of each style. Prerequisites: THTR 2400 and THTR 3730 or consent of instructor.

THTR 4900 Performance Seminar (3). Selected topics in acting, directing, and design as they relate to performance. Course involves class discussions, papers, out-of-class work, and research. Students work as a group and/or on individual topics and projects. A final project is the end product for the class. Prerequisites: Any two of THTR 2400, 3000, 3030. Required of students with a concentration in Theatre.

## Department of Criminal Justice

## Deborah Burris-Kitchen, Ph.D., Department Chair 308 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5571

Faculty: D. Burris-Kitchen, M. Montgomery, R. Smith, L. Woods.

General Statement: The Department of Criminal Justice offers a program leading to the degree of Bachelor of Science. The curriculum contains a wide range of courses concerning all aspects of the criminal justice system, with an emphasis in the area of corrections. The major also provides a broad background in the social sciences with a wide variety of
courses in Psychology and Sociology. Any student admitted to the University at the undergraduate level is eligible to major in Criminal Justice. It is an excellent pre-law major.

The Department also offers the Master of Criminal Justice (MCJ) degree jointly with Middle Tennessee State University. For details of the program, see the Graduate Catalog.

Departmental Requirements: 45 Semester Hours For Bachelor of Science Criminal Justice

General Education Core
Communications ( 9 hours)
ENGL 1010, 1020 Freshman English I, II 6
COMM 2200 Public Speaking 3
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)
PSYC 2010 General Psychology 3
SOCI 2010 Introduction to Sociology 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
One course from approved list, with lab
One course from approved list, with lab
Typically BIOL 1010, 1011; 1020, 1021; CHEM 1030, 1031;
1040, 1041; ASTR 1010, 1020
Mathematics (3 hours)
MATH 1110 College Algebra
3
Orientation (1 hour)
UNIV 1000 Service to Leadership 1
Total General Education Hours: 42
Other Requirements:
COMP 1210 Introduction to Computing 3

## Upper-division Admission

For admission into the upper-division program of the Criminal Justice major, students must complete all of the requirements listed above under General Education Core and Other Requirements. In addition, they must have removed all high school deficiencies, passed all required remedial/ developmental courses, and earned a cumulative grade point average of at least 2.0 on college-level course work. They must also have earned a minimum grade of C in CRMJ 2000, 2010, 2020, and 2030.

Major Core: A minimum of 45 semester hours with at least 33 hours at the 3000-4000 level. The required courses in the major core are:
CRMJ 2000 Introduction to Criminal Justice Studies 3
CRMJ 2010 Introduction to Law Enforcement 3
CRMJ 2020 The American Legal System 3
CRMJ 2030 Introduction to Corrections 3
CRMJ 3000 Research Methods 3
CRMJ 4000

## CRMJ 4500 Senior Project

Students must also complete a minimum of 15 hours of CRMJ electives at the 3000-4000 level. Police or correctional officers who have completed basic training at a city or state academy receive credit for the Senior Practicum (CRMJ 4000) by registering for it and completing a research paper. All other students must complete a semester of work in a criminal
justice agency to gain practical experience. Students must earn at least a C in all 45 hours used to complete the major.

Minor Requirements: All majors may earn a minor in Psychology by completing PSYC 2010 and 18 additional hours of 3000 and 4000 level psychology courses. See minor requirements in Psychology Department section of this catalog.

Suggested Four-Year Plan:

## Bachelor of Science Degree in <br> Criminal Justice



## Course Descriptions

Criminal Justice (CRMJ)
CRMJ 2000 Introduction to Criminal Justice Studies (3) (Formerly CJ 200). A preliminary examination of the entire criminal justice system. It emphasizes the understanding of basic concepts in police science, correctional services studies, the law and our legal system, and the elements of the scientific method and research techniques. It also functions as an introduction to the orientation and demands of the Tennessee State University Department of Criminal Justice. Required of all CJ majors.

CRMJ 2010 Introduction to Law Enforcement (3) (Formerly CJ 201). An intensive study of findings and concepts in the area of police science. It covers law enforcement agencies, their procedures, and their problems. There is discussion of police-community relations and the FBI. History is emphasized. Required of all CJ majors.

CRMJ 2020 The American Legal System (3) (Formerly CJ 202). An intensive study of the concepts and findings of research concerning the functioning and the structure of the American legal system. Its history and development are stressed, and its place in the entire criminal justice system is discussed. Elements of constitutional criminal law are introduced. Problems such as crowded dockets, plea bargaining, and bail are discussed. Required of all CJ majors.

CRMJ 2030 Introduction to Corrections (3) (Formerly CJ 203). An intensive study of the concepts and findings of research in the area of corrections. In addition to consideration of the history and development of the correctional system, various techniques of correction are considered. The relationship of society and its norms to the operations of such systems is included. Required of all CJ majors.

CRMJ 3000 Research Methods (3) (Formerly CJ 300). An intensive survey of the various methods appropriate to criminal justice studies. Special emphasis is given to the consideration of logic, design, and importance of research for correctional practitioners. In addition to the development of research skills, a purpose of this course is to develop the student's ability to read critically and to evaluate proposals for change. Prerequisites: MATH 1010, PSY 2180 or SOCI 3000 and ENGL 3106.

CRMJ 3010 Court Procedure and Methods (3) (Formerly CJ 301). An intensive study of courtroom case preparation, officer demeanor in court, effective presentation of evidence, trial procedure, use of written notes, officer appearance, and reaction to cross examination. (Elective)
CRMJ 3020 Constitutional and Criminal Law (3) (Formerly CJ 302). Discussion of criminal law and procedure, including constitutional law as it impinges upon the legal system and the crime. Topics include review of the relevant constitutional criminal cases before the various courts of appeals and the United States Supreme Court. (Elective)

CRMJ 3030 Incidence of Crime (3) (Formerly CJ 303). Intensive discussion of the problems involved with crime statistics. Course reviews uniform crime reports and relevant studies. Careful attention is devoted to the concept of unreported crime. (Elective)
CRMJ 3040 Criminal Typology (3) (Formerly CJ 304). Intensive discussion of the types of crimes. Consideration is given to the various bases for the division of crimes into different categories. In addition, there is an intensive examination of the specific research findings on crimes such as rape, robbery, and murder. (Elective).

CRMJ 3050 Deviance and Control (3) (Formerly CJ 305). A sociological discussion of the nature and role of deviance in a society. The various types of deviance are considered, and the nature of the relationship between deviance and the controlling and producing forces of society is discussed. The relationship of deviance to crime is also considered. (Elective)
CRMJ 3060 Introduction to the Philosophy of Law (3) (Formerly CJ 306). The philosophical development of the concept of law from the Pre-Greek era to the present (Babylonian, Greek, Roman, Germanic, and English systems), with emphasis on the more important philosophical ideas that have led to the present American legal system. (Elective)
CRMJ 3070 Introduction to the Study of Law (3) (Formerly CJ 307). An in-depth analysis of the Socratic method and case method of legal studies, along with the organization and function of law schools. The course should be taken by only those students interested in pursuing a career in law. (Elective)

CRMJ 3080 Police and Patrol Service (3) (Formerly CJ 308). A study of the organization, administration, and supervision of patrol function. Responsibilities, techniques, and methods of police and patrol are treated. Various services and public assistance offered by police organizations are emphasized. (Elective)
CRMJ 3090 Traffic Investigation and Control (3) (Formerly CJ 309). A study of the need for and development of traffic laws with primary attention focused upon the Uniform Motor Vehicle Code and Model Traffic Ordinances, including use and implementation. The preparation and maintenance of an adequate records system of traffic safety are examined. (Elective)

CRMJ 3100 Criminal Theory (3) (Formerly CJ 310). A survey of the various theories which have been advanced over the years about the causation of crime; biological, sociological, psychological, and other theories are examined along with relevant research findings. (Elective)

CRMJ 3130 Counseling (3) (Formerly CJ 313). An intensive introduction to counseling, with special emphasis upon the nature and problems of correctional guidance counseling. Attention is devoted to the recognition and diagnosis of the psychological problems, as well as development of acceptable counseling methodology. Development of oral competency is stressed, as students participate in mock counseling sessions. (Elective)

CRMJ 3210 Juvenile Delinquency (3) (Formerly CJ 321). An intensive study of the basic ideas of criminology as applied to juvenile delinquency. Attention is devoted to the development and impact of the juvenile court system. (Elective)

CRMJ 3220 Penal Institutions and Treatment Methods (3) (Formerly CJ 322). Intensive discussion of the methods of corrections involving prisons, jails, and other places of incarceration. Special emphasis is placed on the inmate, treatment of custodial conflicts, and the utility (or lack of utility) of such institutions. (Elective)
CRMJ 3230 Community-Based Treatment Methods (3) (Formerly CJ 323). Intensive study of probation, parole, work-release, and other correctional methods which involve the inmate in his or her community rather than incarceration. Merits and defects of such programs are examined. (Elective)

CRMJ 3300 Police Administration I (3) (Formerly CJ 330). An examination of the principles of organization, administration, and functioning of police departments. Course includes an evaluation of personnel policies, divisions, operations, command policies, and departments as a whole. (Elective)

CRMJ 3310 Police Administration II (3) (Formerly CJ 331). Advanced study of the organization, administration, and functioning of police departments. The designing of policies and a study of the arrangement within a department of specific operations and commands are emphasized. (Elective)

CRMJ 4000 Senior Practicum (12) (Formerly CJ 400). Field experience consisting of nearly full-time work in an appropriate institution or agency. Course also involves intensive weekly discussions of problems that arise. Usual enrollment time is the student's senior year of study. Required of all CJ majors.

CRMJ 4010 Independent Study (3) (Formerly CJ 401). For the student who shows exceptional promise. Course consists of a research project or intensive reading program specially designed for the individual student. Only those students whose work shows reasonable probability of a new contribution to knowledge are permitted to enroll. Prerequisite: permission of Department Chair. (Elective)
CRMJ 4050 Introduction to Criminalistics (3) (Formerly CJ 405). A course designed to give the student a basic knowledge of crime scene protection, as well as the collection, preservation, and identification of evidence, including proper search, dusting for latent prints, casting, fingerprint classification, use of the crime laboratory, and crime detection and prosecution. (Elective)
CRMJ 4100A, 4100B Cooperative Education I, II $(3,3)$ (Formerly CJ 410A, 410B). Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, or learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Chair. (Electives)
CRMJ 4200 Seminar in Law Enforcement (3) (Formerly CJ 420). Review and synthesis of basic principles, practices, and procedures. Course includes visitation to operating police organization and final preparation for employment in law enforcement. (Elective)
CRMJ 4220 White Collar Crime (3) (Formerly CJ 422). A discussion of the incidence and problems of white collar crime. Topics range from tax evasion and business crimes to political corruption and bribes. (Elective)

CRMJ 4300, 4310, 4320 Special Topics I, II, III (3, 3, 3) (Formerly CJ 430, 431, 432). A course taught from time to time as faculty expertise and student interest warrant, with topics in such areas as policecommunity relations, behavior modification in corrections, and street laws. (Elective)
CRMJ 4500 Senior Project (3) (Formerly CJ 450). Course involving the preparation of an acceptable piece of research, including a final written report, in some aspect of criminal justice. Required of all CJ majors. Prerequisites: ENGL 3106 and CRMJ 3000

# Department of History, Political Science, Geography, and Africana Studies 

Erik S. Schmeller, Ph.D., Department Chair 216 Hubert Crouch Hall (Graduate Building) Telephone 615-963-5471

Faculty: G. Bekele, M. Bertrand, S. Browne, T. Corse, E. Dachowski, D. Gibran, H. King, J. Miglietta, M. Monanabela, A. Oyebade, D. Padgett, J. Paruchuri, A. Patrick, B. Russell, E. Schmeller, L. Williams-, W. Yefru.

Purpose: The Department of History, Political Science, Geography, and Africana Studies seeks to expand students' awareness of their world, its history, and its political institutions. The Department offers general education courses for all students of the University, minor concentrations in each of its four disciplines, and full undergraduate degree programs in History and Political Science.
Admission and Retention: The undergraduate degree in History is a Bachelor of Arts degree, which means that History majors complete at least one foreign language at the intermediate level. The undergraduate degree in Political Science is a Bachelor of Science degree and does not include the requirement of a foreign language. Students pursuing either degree must obtain a grade of $C$ or better in all courses used to satisfy major requirements. The minor in Geography consists of 18 hours including physical, systematic, and regional geography courses. The minor in Africana Studies consists of 18 hours. The minimum grade point average for receiving either baccalaureate degree is 2.0.

Pre-Law Studies: Although any major is acceptable for law school, Political Science and History are the most popular majors of all students entering law school. Our classes provide excellent preparation for law school, both for Political Science and History majors, as well as for students in other disciplines considering law school. Students interested in law school should take course that help to develop their analytical and communication skills. In addition to Political Science and History courses, upper-level courses in English, Philosophy, and Business are highly recommended. Students who are interested in law specific courses should consider the following Science courses: 4210 Judicial Process; 4300 Introduction to American Law; 4310 Constitutional Law; Separation of Powers; 4320 Constitutional Law; The Bill of Rights; 4340 Legal Research and Writing; and 4350 International Law. Students interested in pursuing law school should meet with TSU's pre-law advisor, who can be reached at tsuprelaw@tnstate.edu, as soon as possible.
Teacher Licensure: The curriculum for this program includes the University's general education requirements, the requirements for the major, and series of professional education courses culminating in a student teaching internship during the second semester of the senior year-and an entire year beginning in Fall 2013. Majors in History and Political Science who wish to seek teacher licensure for grades 7-12 in History, Government, and Geography should apply in writing to the College of Education for admission to the Teacher

Education Program, usually during their sophomore year. Applicants must have a cumulative grade point average of 2.75 or better and must pass the Praxis Series PreProfessional Skills Test (PPST) or the Computer-Based Academic Skills Assessment Tests (CBT). Students who have previously earned a score of 22 on the ACT or Enhanced ACT, or a combined score of 990 on the verbal and mathematical portions of the SAT are exempt from the PPST and the CBT. Admission to the Teacher Education Program is a prerequisite to all upper-level courses in the professional education curriculum. For a complete description of admission and retention requirements for the Teacher Education Program, see the College of Education section.

The Tennessee Board of Regents Teacher Education Redesign Initiative, Ready2Teach, will officially begin in the fall semester of 2013. Ready2Teach requires residency in K-12 schools during the senior or final year (fall and spring) of undergraduate teacher licensure programs. The residency year includes Residency I during the fall semester and Residency 2 during the spring semester. Residency 1 will include methods courses and 90+ hours field study in K-12 schools. Residency 2 requires a full semester ( 16 weeks) of student teaching. Residency 1 will only be offered in the fall
while Residency 2 will only occur in the spring. This initiative applies to all undergraduate teacher education candidates pursuing teacher licensure. All programs of study will be changed to reflect the new program beginning in the fall semester of 2013. Students are required to seek advisement regarding their licensure programs as early as possible during their academic career at Tennessee State University to ensure that all prerequisite courses and Praxis exams are complete in preparation for Residency.

Accreditation: The teacher licensure programs in the Department are approved by the Tennessee Department of Education. The University's teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

WRITE Programs: The history and political science majors, as participating WRITE Programs, are committed to providing students with the opportunity to develop the written communication skills necessary to succeed in their discipline and vocation. Working in partnership with the WRITE Program, the history and political science majors build on and promote the transference of writing skills from the general education curriculum through specifically sequenced core courses.

Department Requirements for Bachelor of Arts in History - 39 Semester Hours

## Mission

The study of the past at TSU espouses a mission that is distinctive to Historically Black Colleges and Universities. That mission has been to encourage every student who enters the university to understand that obstacles on the path to success are to be overcome. Grounded in this tradition, the History Department at TSU provides classes, speakers, and research opportunities that encourage students to explore groups whose struggles and celebrations center upon the issues of race, class, gender, and sexual orientation on local, national, and global levels. Given the nature of the institution, the constituents it has served, and the purpose of the program as described above, history is essential to the mission of Tennessee State University.

## Program Goals

The major in History is designed to familiarize students with important events, developments, and themes of the human past while also training them in the skills of history as an intellectual discipline. While students are welcome to focus their studies regionally or topically, the curriculum and degree requirements reflect the goal of providing students with a broad understanding of their field at the local, national, and international levels.

## Student Learning Outcomes:

Students awarded a Bachelor of Arts in History should be able to:

1. recognize the characteristic features of history as an academic discipline;
2. evaluate claims about the past critically with sensitivity to the importance of historical and cultural contexts;
3. conduct thorough historical research with recourse to both primary and secondary sources;
4. advance original historical arguments in well-written essays with appropriate citation of sources;
5. identify the major periods of the human past and recognize alternative approaches to periodization;
6. compare patterns of continuity and change in the history of world civilizations;
7. explain major themes and events in the history of North America and the United States; and
8. explore the differences and relationships between political, social, economic, and cultural history.

## General Education Core:

The following courses are recommended in order to satisfy the requirements of the General Education Core. For a complete listing of all courses satisfying these requirements, please refer to the General Education section of the catalog.

Communications: (9 hours)

| ENGL 1010, 1020 | Freshman English I, II <br> (minimum grade of $C$ in each) | 6 |
| :--- | :--- | :--- |
| COMM 2200 | Public Speaking | 3 |

Humanities and/or Fine Arts (9 hours)
ENGL 2110-2124 Sophomore Literature Course 3
HIST $1210 \quad$ World History I
HIST $1220 \quad 3$
Social and Behavioral Science (6 hours)
GEOG 1010 World Regional Geography I 3
GEOG 1020 World Regional Geography II 3
History (6 hours)
$\begin{array}{ll}\text { HIST } 2010 & \text { American History I } \\ \text { HIST } 2020 & \text { American History II }\end{array}$
Natural Science (8 hours)
Two courses with labs from the approved list.
Mathematics (3 hours)
MATH 1013, or Contemporary Mathematics

Orientation (1 hour)
UNIV 1000 Service to Leadership 1
Total General Education Hours 42
Other Requirements: Six hours in a single foreign language; French or Spanish through the intermediate level $(2010,2020)$

## Upper-level Admission

For admission to the upper-level program of the History major, students must complete all of the requirements listed above under General Education Core and Other Requirements. In addition, they must have removed all high school deficiencies, passed all required developmental courses, and earned a cumulative grade point average of at least 2.0 on college-level course work. Students must also have earned minimum grades of C in HIST 1210, 1220, 2010, and 2020.

## Major Core

The requirements for a major in History include HIST 1210 and 1220, World History I, II (6 hours); GEOG 1010 and 1020, World Regional Geography I, II (6 hours); two 3000 or 4000level United States history courses (6 hours); at least 6 hours at the 3000 or 4000 level in non-U.S. history; HIST 3500,
History Workshop (3 hours); HIST 4500, Senior Project (3 hours); and 9 additional upper-level hours in History. All History courses must be completed with a grade of $C$ or better.

Minor Requirements: A minimum of 18 semester hours in History, including HIST 2010 and 2020.

Department Requirements for Bachelor of Science Degree in Political Science 39 - Semester Hours

## Mission:

To build a community of responsible, engaged and informed citizens and leaders by developing the substantive knowledge and intellectual skills necessary to analyze, interpret, and participate in domestic and international affairs. We prepare our majors for graduate and law schools, as well as for careers as leaders in the public and private sectors.

## Program Goals:

The major in Political Science is designed to familiarize students with both American and international politics while also training them in the skills of political science as an intellectual discipline. The program's upper-level curriculum encourages a broad exposure to the discipline while also allowing students to specialize in areas such as international relations, public policy, and the American legal system.

## Student Learning Outcomes:

Students awarded a Bachelor of Science in Political Science should be able to:

1. recognize the characteristic features of Political Science as an academic discipline;
2. conduct thorough research according to the standard methods of political scientists;
3. advance original arguments in well-written essays with appropriate citation of sources;
4. explain and distinguish between alternative philosophies of government;
5. describe and compare different political systems and forms of government;
6. describe the American political systems, including the federal government, state and local governments, and the relationships among branches and levels of government;
7. explain the institutions and processes through which governments interact with one another across international political boundaries; and
8. describe the ways in which individuals organize to influence politics and effect political change.

General Education Core:
The following courses are recommended in order to satisfy the requirements of the General Education Core. For a complete listing of all courses satisfying these requirements, please refer to the General Education section of the catalog.

Communications (9 hours)
$\begin{array}{lll}\text { ENGL 1010, 1020 } & \begin{array}{l}\text { Freshman English I, II } \\ \text { (minimum grade of C in each) }\end{array} & 6 \\ \text { COMM 2200 } & \text { Public Speaking }\end{array}$
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2124 Sophomore Literature Course 3
Two courses from the approved list
6
Social and Behavioral Science (6 hours)
POLI 1010 Introduction to Political Science 3
POLI 2010 American National Government 3
History (6 hours)
HIST 2010 American History I 3
HIST 2020 American History II 3
Natural Science (8 hours)
Two courses with labs from the approved list. 8
Mathematics (3 hours)
$\begin{array}{ll}\text { MATH 1013, or } & \text { Contemporary Mathematics } \\ \text { MATH 1110 } & \text { College Algebra I }\end{array}$
Orientation (1 hour)
UNIV 1000 Service to Leadership 1
Total General Education Hours 42
Upper-level Admission:
For admission into the upper-level program of the Political Science major, students must complete all of the requirements listed above under General Education Core. In addition, they must have removed all high school deficiencies, passed all required remedial/developmental courses, and earned a cumulative grade point average of at least 2.0 on college-level course work. They must also have earned a minimum grade of C in POLI 1010 and POLI 2010.

Major Core: The requirements for a major in Political Science include POLI 1010, Introduction to Political Science (3 hours); POLI 2010, American National Government (3 hours); POLI 2200, Introduction to International Politics; POLI 2220, State and Local Government (3 hours); POLI 3000, History of Political Philosophy, or, POLI 3010, Contemporary Political Philosophy (3 hours); POLI 3100, Research Methodology (3 hours); POLI 4500, Senior Project (3 hours); and 18 additional upper-level hours in Political Science. All Political Science courses must be completed with a grade of $C$ or better.

Minor Requirements: A minimum of 18 semester hours in Political Science, including POLI 2010.

Department Requirements for a Minor in Geography 18 Semester Hours

## Mission

As we now live in a multi-cultural and globalized world, the study of Geography is vital to help us better understand and appreciate the diversity and the increasing level of interconnection between people, places, and the environment throughout the world. Understanding the variety and complexity of the world's cultural, economic, political, and environmental systems is the foundation of a minor in Geography at TSU. The program promotes students' intellectual growth and professional development by exposing them to geographic knowledge and skills in geospatial technologies needed by employers today to work and provide leadership in a multicultural world.

## Program Goals

The minor in Geography is designed to familiarize students with the spatial arrangement of both human and physical phenomena at the local, regional, and global levels while also training them in the skills of Geography as an intellectual discipline. While students are welcome to focus their studies on physical or human systems, the minor requirements reflect the goal of providing students with a broader exposure to the discipline in the areas of physical, human, and technical geography.

## Student Learning Outcomes:

1. Recognize the characteristic features of Geography as an academic discipline that bridges social and natural sciences.
2. Conduct thorough research applying core geographic concepts, models, and appropriate research methods.
3. Advance original arguments in well-written essays with appropriate citation of sources.
4. Analyze the spatial arrangement of physical and human phenomena on the earth's surface and explain the underlying processes that shape the distribution of these phenomena
5. Explain in the reciprocal relationship between human geographic patterns and the natural environment.
6. Develop skills in geospatial technologies and apply these technologies to analyze and display geographic data.
7. Identify places and regions distinguished by distinctive combinations of cultural and physical features and explain the linkages among them.
8. Think critically about issues of globalization and local diversity and environmental sustainability.

The Department provides an opportunity for students to enrich their education by obtaining a minor in Geography, composed of 18 semester hours of courses, including two semesters of World Regional Geography (GEOG 1010 and 1020) and a minimum of one course from each of the three components of the program: physical geography, systematic geography, and regional geography.

World Geography (6-Hours)
GEOG 1010 World Regional Geography I 3
GEOG 1020 World Regional Geography II
Students must select at least one course from each of the following areas.
A. Physical Geography (3-6 Hours)

GEOG 3010 Physical Geography
GEOG $3020 \quad$ Physical Geography II
GEOG 3500 Weather and Climate
GEOG 4990 Special Topics in Geography
B. Systematic Geography (3-6 Hours)

GEOG 4300 Social Geography
GEOG 4440 Cultural Geography 3
GEOG 4640 Environmental Geography 3
GEOG $4700 \quad 3$
GEOG 4750 Economic Geography 3
GEOG $4850 \quad 3$
GEOG 4990 Special Topics in Geography
C. Regional Geography (3-6 Hours)

GEOG 3710 Geography of the United States
and Canada
GEOG 3720 Geography of Mexico and the Caribbean
GEOG 3730 Geography of South America
GEOG 4000 Geography of Latin America
GEOG 4100 Geography of Asia
GEOG 4120 Geography of Africa
GEOG 4250 Historical Geography of the United States
and Canada
GEOG 4990 Special Topics in Geography

## Department Requirements for a Minor in Africana Studies - 18 Semester Hours

General Statement: The Africana Studies Program offers an 18 credit hour Minor designed to complement a student's major in one of the University's degree granting programs. The Program's curriculum and pedagogy are designed to prepare students for success in a diverse and increasingly interdependent global economy and job market.

The Program has links with public and private sector organizations that provide opportunities for Africana Studies Minor candidates to gain valuable experience through Internships, and the Program's Field Studies Office offers outstanding study abroad opportunities.

Furthermore, the Africana Studies Program serves as a resource center for the Black community -- including Africa and the African Diaspora -- for schools, government agencies, businesses, and other agencies and community constituencies across the state of Tennessee.

The study of the Black culture and life, including Africa and its Diaspora, is essential to the University's mission as an institution of higher education.

Core Learning Outcomes:

- Ability to demonstrate verbally and in writing an understanding of the nature and purpose of knowledge production and utilization, with special attention to indigenous and diasporic African systems of knowledge.
- An appreciation of the centrality of Africa in world civilization, and an understanding of the historic, cultural, linguistic and religious forces that shape the place of black people in today's increasingly global and interconnected world.
- Ability to use Black social theories and paradigms to collect, measure, organize, analyze and synthesize data on the major challenges facing Black people, and to create compelling presentations that advance reasonable solutions.

Students from any discipline at TSU may opt for the Minor in Africana Studies as a complement to their degree program. The Minor in Africana Studies, coupled with their major, gives them an advantage in the job market and in graduate and professional studies.

Career Opportunities: In Africana Studies, we assist you in selecting courses that will help you meet your life and career goals. A Minor in Africana Studies can help prepare students for graduate and professional studies in a variety of disciplines, and enhance the chances of landing both public and private sector careers. Employers are increasingly concerned that their employees understand issues of diversity and tolerance, and are conversant with global and international issues. In a diverse and globally interdependent world, a Minor in Africana Studies gives students a competitive edge.
The Africana Studies Minor: The Africana Studies Program offers a Minor in Africana Studies designed to complement the student's degree in one of the many disciplines offered at TSU. The 18 semester credit hours required for the Minor are outlined below
Undergraduate Minor Core: (9 semester hours)
$\begin{array}{lll}\text { AFAS } 2010 & \text { Introduction to Africana Studies } \\ \text { AFAS } 2030 & \text { African Diaspora }\end{array}$
AFAS 4600 Independent Studies and Research
3
3

Electives: 6 semester hours
Minor candidates are required to complete an additional 6 hours of Africana Studies courses (at least 3 of which must be

3000 or 4000 level), selected from the following list, in consultation with their Africana Studies adviser:

| AFAS 2110 | Cultural Anthropology of Africa | 3 |
| :--- | :--- | :--- |
| AFAS 2020 | Survey of Africa | 3 |
| AFAS 3000 | African Male: Identity, Culture, and | 3 |
|  | Expressions |  |
| AFAS 3050 | African Female: Identity, Socialization, | 3 |
|  | and Status <br> AFAS 3100 | Psychological Impact of Enslavement |
|  | and Colonization | 3 |
| AFAS 3400 | African Spiritual Philosophy I | 3 |
| AFAS 3600 | African Extended Family | 3 |
| AFAS 3620 | African-American Family | 3 |
| AFAS 3650 | The African-American Community | 3 |
| AFAS 3800 | African Spiritual Philosophy II | 3 |
| AFAS 3950 | The Great Debate | 3 |
| AFAS 3990 | Field Studies | 3 |
| AFAS 4120 | Classical African Civilization | 3 |

Additional Elective: 3 credit hours
One course must be taken from the following list of courses:

| ENGL 3800 | African Literature | 3 |
| :--- | :--- | :--- |
| ENGL 3850 | Caribbean Literature | 3 |
| GEOG 4120 | Geography of Africa | 3 |
| HIST 4880 | Africa and the Trans-Atlantic | 3 |
| HIST 4850, 4860 | Slave Trade | History of Africa I and II |
| HIST 4890 | Modern Africa, 1960-Present | 3 |
| HIST 4910, 4920 | African-American History I, II | 3 |
| POLI 4920 | Black Politics | 3 |

Total Credits Required: 18 - Hours
Suggested Four-Year Plan:

| Bachelor of Arts Degree in History |  |  |  |
| :--- | :---: | :--- | :---: |
|  | FRESHMAN YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| HIST 1210 | 3 | HIST 1220 | 3 |
| UNIV 1000 | 1 | MATH 1013 or 1110 | 3 |
| Foreign Language 1010 | 3 | Foreign Language 1020 | 3 |
|  |  |  | 14 |


| SOPHOMORE YEAR |  |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Sophomore Literature | 3 | Elective | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| GEOG 1010 | 3 | GEOG 1020 | 3 |
| ELECTIVE | 3 | COMM 2200 | 3 |
| Foreign Language 2010 | 3 | Foreign Language 2020 | 3 |
|  |  |  | 15 |


| JUNIOR YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIST 3500 | 3 | Upper-Div. U.S. HIST | 3 |
| Upper-Div. U.S. HIST | 3 | Upper-Div. Non-U.S. HIST | 3 |
| Upper-Div. Non-U.S. HIST | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
|  | 15 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Upper-Div. HIST | 3 | HIST 4500 | 3 |
| Upper-Div. HIST | 3 | Upper-Div. HIST | 3 |
| Upper Division Elective | 3 | Upper Division Elective | 3 |
| Upper Division Elective | 3 | Upper Division Elective | 3 |
| Upper Division Elective | 3 | Upper Division Elective | 3 |
|  | 15 |  | 15 |

Suggested Four-Year Plan: 120-Hours
Bachelor of Arts Degree in History
With Teacher Certification Licensure for Grades 7-12

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| NATURAL SCIENCE | 4 | NATURAL SCIENCE | 4 |
| HIST 1210 | 3 | HIST 1220 | 3 |
| ASOR 1002 | 1 | MATH 1013 or 1110 | 3 |
| Foreign Language 1010 | 3 | Foreign Language 1020 | 3 |
|  |  |  |  |
|  |  |  |  |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Sophomore Literature | 3 | COMM 2200 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| GEOG 1010 | 3 | GEOG 1020 | 3 |
| EDCI 2010 | 3 | PSYC 2420 | 3 |
| Foreign Language 2010 | 3 | Foreign Language 2020 | 3 |
|  |  |  | 15 |

JUNIOR YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| HIST 3500 (Fall Only) | 3 | Upper-Div. U.S. HIST | 3 |
| HIST 2030 | 3 | Upper-Div. Non-U.S. | 3 |
| HIST | 3 |  |  |
| Upper-Div. Non-U.S. | 3 | History Seminar |  |

FALL SEMESTER HR SPRING SEMESTER HR

| HIST 3710 | 3 | EDCI 4705 | 3 |
| :--- | :--- | :--- | :--- |
| HIST 4500 | 3 | HIST 4720 | 9 |

HIST 4720
4910
EDCI 4620

| 6 |
| :---: |
| 15 |

12
Suggested Four-Year Plan: 120-Hours
.

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| POLI 1010 | 3 | POLI 2010 | 3 |
| UNIV 1000 | 1 | Humanities Elective | 3 |
| Humanities Elective | 3 | MATH 1013 or 1110 | 3 |
|  | 14 |  | 16 |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Sophomore Literature | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | POLI 2220 | 3 |
| POLI 2200 | 3 | Elective | 3 |
| COMM 2200 | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
|  | 15 |  | 15 |

$\begin{array}{lcc} & \text { JUNLIOR SEAR } \\ \text { FEMESTER } & \text { HR SPRING SEMESTER HR }\end{array}$
POLI 31003 Upper-Div. Political Sci. 3

Upper-Div. Political Sci. 3 Upper-Div. Political Sci. 3
POLI 3000 or 30103 Upper-Div. Political Sci.
Elective 3 Elective
Elective 3 Elective

|  | SENIOR YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Upper-Div. Political Sci. | 3 | POLI 4500 | 3 |
| Upper-Div. Political Sci. | 3 | Upper Division Elective | 3 |
| Upper Division Elective | 3 | Upper Division Elective | 3 |
| Upper Division Elective | 3 | Upper Division Elective | 3 |
| Upper Division Elective | 3 | Elective | $\frac{3}{15}$ |

Suggested Four-Year Plan: 120-Hours

## Bachelor of Science Degree in Political Science With Teacher Certification in Government

 Licensure for Grades 7-12FRESHMAN YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science | 4 | Natural Science | 4 |
| POLI 1010 | 3 | POLI 2010 | 3 |
| ASOR 1002 | 1 | EDCI 2010 | 3 |
| MATH 1013 or 1110 | 3 | COMM 2200 | 3 |
|  | 14 |  | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Sophomore Literature | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | POLI 2220 | 3 |
| POLI 2200 | 3 | HIST 1220 | 3 |
| HIST 1210 | 3 | GEOG 1020 | 3 |
| GEOG 1010 | 3 | PSYC 2420 | 3 |
|  | 15 |  | 15 |
| JUNIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| POLI 3100 | 3 | Upper-Div. Political Sci. | 3 |
| POLI 3000 or 3010 | 3 | Upper-Div. Political Sci. | 3 |
| Upper-Div. Political | 3 | Upper-Div. Political Sci. | 3 |
| Upper-Div. Political | 3 | EDSE 3330 | 3 |
| Sci. |  |  |  |
| Upper-Div. Liberal Arts Elective | 3 | EDCI 3870 | 3 |
| Upper-Div. Geography | 3 |  |  |
|  | 18 |  | 15 |
| SENIOR YEAR |  |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| HIST 3710 | 3 | HIST 4720 | 9 |
| POLI 4500 | 3 | EDCI 4705 | 3 |
| EDRD 4910 | 3 |  |  |
| EDCI 4620 | 6 |  |  |
|  | 15 |  | 12 |
| Course Descriptions |  |  |  |

AFAS 2010 Introduction to Africana Studies (3) (Formerly AFAS 2010). A course which defines the subject matter, concepts, principles, scope, and goals of Africana Studies. Reflecting the interdisciplinary nature of Africana Studies, this course is a survey of the African world community, from the perspectives of the humanities and social sciences, science and technology, and the expressive arts. Course may be used to satisfy the University's social science requirement. Required of all Africana Studies minors.
AFAS 2020 Survey of Africa (3). This course investigates patterns of state-society relations in 21st century Africa from three perspectives: pre-colonial; colonial and post-independence Africa. Surveys of these periods include conflict resolution; conflict management; ethnic politics; social and economic development.

AFAS 2030 African Diaspora: Cultures, Communities and Nations (3). The African Diaspora is a survey of African descendants living in Asia, the Caribbean, Europe, the Middle East, North America and South America.

AFAS 2110 Cultural Anthropology of Africa (3). The course focuses on the Paleolithic period of Africa in the Nile Valley. Special attention shall be given to the people of the Nile Valley areas and Northeast Africa, Upper Kemet, Nubia, the Fayum, Middle Kemet and the Libyan oasis.

AFAS 3000 African Male: Identity, Culture, and Expressions (3). Analysis of the situation of African males in the United States, Africa, the Caribbean, and South America. Particular attention is given to "rites of passage" and males' socialization from birth to manhood in these societies.

AFAS 3050 African Female: Identity, Socialization, and Status (3). A comparative study of the traditions, continuity, and changes affecting girls and women of African descent in the U.S., Africa, the Caribbean, and South America. Course uses both literary works and social science studies to explore the portrayals of and historical contexts for the lives of females of African descent, focusing on concepts of girlhood, social status, and sexuality, as well as on discrimination experienced by these women.

AFAS 3100 Psychological Impact of Enslavement and Colonization (3). Critical examination of enslavement and colonization on the minds and institutions of Africans throughout the world.

AFAS 3400 African Spiritual Philosophy I (3). An overview of Africa's indigenous spiritual philosophy and practices, from the ancient and pre-Maafa period to present, including its unfolding and influence in Africa's diaspora. Prerequisite: none. AFAS 2010 recommended.
AFAS 3600 African Extended Family (3). Study in the extended family as a cultural form of social and political organization in Africa. Since the first form of the traditional family in Africa was the extended family, emphasis is placed on the values of communalism, collective work, cooperative economics, and community self-reliance. Attention is given to the family as the basic unit of social organization in African cultures.
AFAS 3620 The African-American Family (3). An examination of the dynamics of the African-American family. The course studies the institution of marriage, customs, male/female relationships, and value orientation. Special attention is given to both the nuclear family and the extended family in the African-American community.

AFAS 3650 The African-American Community (3). An examination of the dynamics of the African-American community. Attention is given to phenomena such as the family, religious institutions, political organizations, human rights organizations, economics, health care education, and social problems such as violence, drugs, and dysfunctional families.

AFAS 3800 African Spiritual Philosophy II (3). A continuation of AFAS 3400, an exploration of Africa's indigenous spiritual philosophy, from the ancient and pre-Maafa period including ideas concerning the nature and meaning of being, ethics, purpose, family and community life, ancestors, the transition, and the Eternal Spirit. Prerequisite: AFAS 3400 recommended.
AFAS 3950 The Great Debate: Martin Luther King, Jr., and Malcolm X (3). A critical examination of the philosophies of Dr. Martin Luther King, Jr., El-Hajj Malik El-Shabazz (Malcolm X), and a synthesis of these two perspectives. The climax of the course is a debate in which the students argue important issues from these three perspectives. Traditional African ceremonies and cultural vignettes are an integral part of this debate.

AFAS 3990 Field Studies: The course is designed to allow students to work independently or in groups on significant topics and projects not covered in other courses. Students will be instructed on field research techniques through a special arrangement with other research oriented institutions. Topics include the African American Community and family studies based on the Community Outreach Program of the University. The course also serves the University's Study Abroad Program. This is a curriculum for community outreach and family studies in the field and, as well as, study abroad for junior and senior students who would like to have variable credits hours (3-6) in their particular discipline.
AFAS 4120 Classical African Civilizations (3) An advanced seminar to explore in depth some aspect of ancient civilizations of Africa. It concentrates on such topics as cosmology and primordial philosophy. Particular attention is given to Kemetic astronomy, mathematics, the solar calendar, and the writing system.

AFAS 4600 Independent Studies and Research (3) Course designed to allow students to work independently or in groups on significant topics and projects not covered in other courses. Students carry out their work through a preceptorial arrangement with instructor.

## Geography (GEOG)

GEOG 1010, 1020 World Regional Geography I, II (3, 3). A survey of the geographic regions of the world, including studies of the physical character of the land, resources, economics, and cultures. Courses are designed to provide general background in world geography; they are required for History majors, Geography minors, and some teacher education programs. Both courses may be applied toward the Social Science requirement of the General Education Core.
GEOG 3010, 3020 Physical Geography I, II (3, 3). Study of landforms, maps, weather and climate, vegetation, soils, mineral resources, major surface waters, ground water regions, and types of coastlines. Included are the cause and distribution of these elements and their impact on humanity.
GEOG 3100 Cartography (3) The nature and use of maps, the construction of map projections and their uses, and the preparation and use of maps for various types of analysis. Course includes both lectures and laboratories.

GEOG 3150 Online Studies in Geographic Information Systems (3). Online course focused upon hands-on application of geographic information systems (GIS) and related geospatial technology. Spatial analysis of data and information inherent in the assessment of political, economic, social, and environmental phenomena. Course may be applied toward the Intelligence Studies minor and the Urban Studies major.
GEOG 3200 Geographic Information Systems Applications in Intelligence Studies (3). Advanced applications of geographic information systems (GIS) and related technologies in research related to intelligence studies. Spatial analysis of data and information in the assessment of political, economic, and social indicators.

GEOG 3500 Weather and Climate (3) The properties, behavior, and importance of the atmosphere. Emphasis is given to observation and analysis of clouds and storm systems-cyclones, tornados and hurricanes-the causes and global distribution of climate types, and major atmospheric concerns, including the greenhouse effect, acid rain, the ozone hole, and climatic change.

GEOG 3710 Geography of the United States and Canada (3) The physical and cultural geography of the regions of Anglo-America, with recognition, analysis, and interpretation of the landforms, resources, and human adjustments that are made within its several regions.

GEOG 3720 Geography of Mexico and the Caribbean (3) A study of Mexico, Central America, and the islands of the Caribbean: their historical geography, cultural patterns, economic resources, and role among the nations of the world.
GEOG 3730 Geography of South America (3). Regions and resources of South America beyond the Caribbean, with special study of the distinctive role of each country according to its geographic significance. Problems of future development are emphasized.
GEOG 4000 Geography of Latin America (3) An analysis of the physical and cultural characteristics of Latin America, encompassing Mexico and Central America, the Caribbean, and all of South America. The unique physical and environmental concerns, the vast mosaic of cultures, and the population dynamics in this region are central to this course.
GEOG 4100 Geography of Asia (3) An examination of the physical and cultural geography of Asia, including land utilization, resources, and population characteristics and settlement. Stages of economic development and challenges of the future are examined.
GEOG 4120 Geography of Africa (3) The regions, resources, and peoples of the African continent with special attention to Africa south of the Sahara desert, its development and potential.
GEOG 4250 Historical Geography of the United States and Canada (3) The changing physical and cultural geography of Anglo-America during four centuries of settlement and development.
GEOG 4300 Social Geography (3) The spatial behavior of urban and suburban populations. Topics include prospects of the future to understand and resolve social complexities, such as poverty, unharnessed population growth, overcrowding, social class, and multicultural relationships, including those of the local community.
GEOG 4440 Cultural Geography (3) An introduction to the study of the geography of human cultures. Topics include demographics; migration dynamics and settlement patterns; the spatial dimensions of ethnic, linguistic and religious diversity; political, economic and urban structures; and differing approaches to the ecological interface.

GEOG 4640 Environmental Geography (3) Exploration of the world's natural environment and physical landscapes, and the challenges presented by modern man. Course also includes study of the conservation and environmentalist movements.

GEOG 4650 Geospatial Issues in Environmental Security (3). Introduction to the concept of environmental sustainability as it pertains to national and global security. Assessment of ecological threats to human systems stability using applied geography techniques including geographic information systems (GIS) and remote sensing.
GEOG 4700 Political Geography (3) The structures and function of political regions, with emphasis on the sovereign state, geopolitics, internal conflict, and relationships among sovereign countries, illustrated by unions of nations, recent developments, and current situations.
GEOG 4750 Economic Geography (3) An examination of the geography of world economic systems, including an analysis of the principles of resource utilization and location theory.
GEOG 4850 Urban Geography (3) Cities as geographic units, including functions and structures, with attention to urban growth patterns, socioeconomic functions and issues, rural/urban relationships, and contemporary trends.
GEOG 4990 Special Topics in Geography (3) An in-depth examination of selected areas of geography through readings, research projects, and oral and written presentations. Prerequisites: GEOG 1010 and 1020, or permission of instructor.

## History (HIST)

HIST 1000 Global Culture in History (3) An exploration of cultural diversity in a global historical context. Focusing on a particular element of human culture, the course examines how historians develop an understanding of this subject and use primary sources to construct a narrative. May be applied to the Humanities requirement of the General Education Core.

HIST 2050, 2060 World History I, II $(3,3)$ A survey of the major societies and civilizations of Asia, Africa, the Middle East, and the West - their geography, major economic and social structures, political systems, religions, and philosophies. The first course covers the period from pre-history to about 1500 CE, and the second covers the period from 1500 to the present. Required of all History majors. Both courses may be applied toward the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and ENGL 1020 with minimum grades of "C".

HIST 2010 American History I (3) A study of the development of cultural, economic, and political institutions in America from preColumbian times to 1877. The course may be applied toward the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and 1020 with a minimum grade of "C".
HIST 2020 American History II (3) A study of the development of cultural, economic, and political institutions in America since 1877. The course may be applied toward the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and 1020 with a minimum grade of "C".

HIST 2011, 2021 Honors American History I, II (3, 3). A study of American history from pre-Columbian times to the present. Limited to students in University Honors Program. Both courses may be used to satisfy the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and 1020 with a minimum grade of " C ".
HIST 2030 History of Tennessee (3). A study of the state from neolithic time until the present day. It includes a survey of social, cultural, economic, and political developments which have influenced Tennessee's growth and development. The course may be applied toward the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and 1020 with a minimum grade of " $C$ ".

HIST 2040 Introduction to Public History (3). An introductory course focusing on the distinctions between academic and public history. The course examines the methodology and process of historical work, with specific concentration on the unique focus of public historians. For each section of the course, career choices are presented. Practicing public historians participate as guest lecturers.

HIST 2700 The African American Experience (3) A chronological and thematic study of the history of African Americans in the United States from fifteenth-century West Africa to the present, paying particular attention to the impact Africans and their descendants have had on the creation of American society and their sustained efforts to obtain equality. Students enrolled in the course will use an examination of the lives and writings of African American authors, sources, and scholars as the primary lens to understand the significant events, themes, and experiences of the descendants of the enslaved Africans brought to the United States. May be applied toward the History requirement of the General Education Core. Prerequisite: Completion of ENGL 1010 and ENGL 1020 with minimum grades of "C".

HIST 3010 Europe, 1648-1789 (3) A survey of early modern Europe from the end of the Thirty Years' War to the beginning of the French Revolution. Themes include the rise of the modern state system in Europe, the creation of colonial empires, the development of global commerce, and the impact of scientific revolution and the Enlightenment.

HIST 3020 Europe, 1789-1871 (3) A survey of European history from the French Revolution to the unification of Italy and Germany. This course examines the transformation of Europe through the influence of revolutionary movements and modern ideologies as well as the social and economic forces of urbanization and industrialization.

HIST 3030 Europe, 1871-1945 (3) A survey of Europe from the height of its power and influence to the crisis of its civilization in the First and Second World Wars. The course examines the nature of European imperialism, the growth of international rivalry, the history of fascism and communism, and the great military conflicts of the early twentieth century.

HIST 3040 Europe since 1945 (3) A survey of European history during and after the Cold War. This course examines the end of European empire, the division of Europe in the struggle between the Soviet Union and the United States, and quest for European unity, the collapse of communism, and the challenges of the new century.
HIST 3050 History of Intelligence (3). A survey of the history of intelligence from ancient to modern times with a strong focus on the twentieth and twenty-first centuries. The course explores the development of the concept of intelligence and the varying uses of intelligence data over time, emphasizing case studies from recent history. The primary purpose of the course is to enable students to understand why intelligence is gathered and its uses and limitations in practice. Course may be applied toward the Intelligence Studies minor.

HIST 3100 American Women's History to 1890 (3). An introduction to American women's history and historiography from the colonial period to 1890 focusing on the diversity of women's experiences. The course analyzes the connections between gender, race, class, and sexuality in various cultural, economic, legal, and political contexts.

HIST 3110 American Women's History 1890 to the Present (3). An introduction to American women's history and historiography from 1890 to the present day focusing on the diversity of women's experiences. The course analyzes the connections between gender, race, class, and sexuality in various cultural, economic, legal, and political contexts.

HIST 3185, 3186 Cooperative Education $(3,3)$ Supervised and approved program of learning experiences undertaken by students in governmental, business, or industry setting. Formal proposals, project objectives, and learning plans are reviewed and approved by faculty. Student activity and progress are monitored, evaluated, and graded by a full-time faculty member. Prerequisite: permission of Department Chair.

HIST 3200 History of Mexico (3). An introduction to the social, cultural, economic, and political history of Mexico, primarily since independence, with a background on the colonial and Pre-Columbian periods.

HIST 3310 Colonial and Revolutionary America (3) A study of the economic, social, cultural, and political history of North America and the early United States from 1492 to 1789.

HIST 3320 The Early Republic, 1789-1836 (3) An in-depth study of the American Republic from its beginnings under George Washington through the presidency of Andrew Jackson.

HIST 3330 The Late Republic, 1836-1860 (3) The history of the United States during the mid-nineteenth century. Topics include territorial expansion, sectional conflict, the debate over slavery, and the coming of the Civil War.

HIST 3340 Civil War and Reconstruction (3) A study of the sectional disputes dividing the nation, the course of the Civil War, the Constitutional problems of Reconstruction times, the condition of the freedmen after the war, and the political history of the nation to 1877.

HIST 3350 United States 1877 to 1920 (3) An analysis of the political, economic, and cultural evolution of the United States. Key issues include the end of Reconstruction, end of frontier America, rise of big business, imperialism, the Spanish-American War, the Progressive era, and World War I.
HIST 3360 United States 1920 to 1945 (3) A study of the political, economic, and cultural development of the American people from the end of World War I through World War II. Topics include the Roaring Twenties, the Great Depression, and the New Deal.

HIST 3370 America Since 1945 (3) An investigation of the American nation since World War II. Topics include domestic politics, America's involvement in post-war world affairs, and economic, cultural, and social developments.

HIST 3380 The Cultural History of the United States (3) A study of selected cultural aspects of America from colonial times to the present day. The principal topics include folklore, mythologies, music, art, literature, popular culture, and fads.
HIST 3500 History Workshop (3) An introduction to history as an academic discipline and professional vocation. The course traces the development of history as specialized field, explores its philosophical foundations, and introduces students to the methods, practices, and career opportunities of professional historians. Students should typically take the course during the fall semester of their junior year. Required of all History majors.
HIST 3630 History of Science and Technology (3) Selected topics and sources in the historical development of modern science and technology from the Renaissance to the present. It includes the developments in mathematics, physical sciences, earth sciences, biological sciences, medicine, and technology.

HIST 3690 Economic History of the United States (3) An investigation of selected economic issues in American history from the colonial period to the present. Topics include mercantilism, capitalism, industrialism, labor-management relations, corporatism, and multinational organizations.
HIST 3710 Teaching of History and Social Science (3) The methods, strategies, and materials of the secondary teaching of social studies. The philosophical and definitional literature of the social studies and its relationship to pedagogy are explored. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all History majors in the Teacher Education Program. Prerequisite: official admission to the Teacher Education Program.

HIST 3840 Ancient History (3) An examination of ancient civilizations, including Egyptian, Roman, Hellenic, and Hellenistic cultures. Materials in this course include archaeological evidence, philosophical writings, and political institutions.

HIST 3860 The Middle Ages and Renaissance (3) An intensive study of Western Europe from 500 to 1600. The course focuses on the political, economic, social, and cultural developments of the middle ages, the twelfth-century Renaissance, and the Italian and Northern Renaissance.
HIST 3880 Renaissance and Reformation (3). A survey of political, economic, social, and cultural developments in Europe from approximately 1500 to 1700 . The course begins with the demographic and governmental crises arising from the Black Death and the Hundred Years' War and ends on the eve of the Industrial Revolution.

HIST 4210, 4220 Diplomatic History of the United States $(3,3)$ An analysis of American foreign affairs, 1776 to the present. HIST 4210 begins with the diplomacy surrounding the emergence of the United States as a nation and concludes with the nation's growth into a world power by 1870. HIST 4220 treats the further expansion of the United States' role as a dominant world power by covering the years 1870 to the present, including foreign policies preceding and during the world wars, containment and anti-communist policies, the Vietnam dilemma, detente, and the collapse of the Soviet empire.
HIST 4240 History of Feminism (9). An exploration of historical developments and variations in feminist thought. Through the critical analysis of historical and literary texts, the course examines ideas about gender and sexuality, their intersections with concepts of race, class, and nation, and their changing role in constructions of identity. Prerequisite: HIST 3500 or WMST 2000.

HIST 4250, 4260 American Social and Intellectual History (3, 3) Analysis of social, cultural, and intellectual thought. The first semester covers the period to the Civil War and focuses on such topics as Puritanism, the Enlightenment, romanticism, individualism, Social Darwinism, urbanism, and popular culture. HIST 4260 covers the period from 1865 to the present.
HIST 4320, 4325, 4326 Vital Topics in History (3, 3, 3) Designated topics focusing on specialized historical fields, allowing students to become aware of the expanding frontiers of historical investigation and to participate in an intensive research experience.

HIST 4500 Senior Project (3) A one-semester research and writing project for seniors majoring in History. The course represents the culmination of the undergraduate program in History and should be taken during the fall or spring semester of a student's senior year. Students wishing to enroll under other circumstances must seek prior approval by the Department. Required of all History majors. Prerequisite: HIST 3500.

HIST 4510 Colonial Latin American History (3). An examination of the general history of the civilization of Latin America during European colonization. Covers pre-Columbian Amerindian civilizations, the founding and development of European empires, and the decline and collapse of those empires.

HIST 4520 Contemporary Latin American History (3). An examination of the general history of the civilization of Latin America from independence to the present. Covers the period from the end of European colonization to the present, including nation-building, social and cultural movements, and international relations.

HIST 4580 Public History Administration Internship (3) A practicum or internship with a history-related agency (public or private) to provide the student with on-the-job experiences. The details of the internship are negotiated among student, agency, and instructor. A major paper is required for successful completion of course, as well as a satisfactory evaluation by both instructor and internship agent. Prerequisites: HIST 2040.

HIST 4720 Student Teaching (12) A semester-long, supervised student teaching experience divided between middle school and high school. Required of all students seeking certification in teaching history or government. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently.

HIST 4810, 4820 Asian Civilizations I, II $(3,3)$ An investigation of civilizations of the Indian subcontinent and the Far East, especially China and Japan. The first semester covers the time from the development of the classical period to Western domination. The second semester covers the period from the age of imperialism to the present.

HIST 4840 History and Literature of the British Empire (3). A survey of the major social, cultural, and political developments associated with the British Empire from 1850 to the present. The course explores the impact of Empire on the British, colonized peoples, and the development of post-colonial cultures and identities. Students may not earn credit in both HIST 4840 and ENGL 4840. Prerequisite: admitted to upper division courses.
HIST 4850, 4860 History of Africa I, II $(3,3)$ An examination of the history of Africa from ancient times to the recent period of African nationalism. The first semester addresses the major events and leaders in African history to the beginnings of European colonization. The second covers from colonization through the emergence and organization of independent states.
HIST 4880 Slavery and Slave Trades in Africa (3) A study of the history of slavery and slave trades in Africa with particular focus on domestic slave trading systems, the Arab slave trade, and the transAtlantic slave trade from its beginnings in the $15^{\text {th }}$ century to its suppression in the 1800s.

HIST 4890 Modern Africa, 1960-Present (3) A study of Africa in the post-independence period. Topics include the challenges of economic development, issues of the environment and population, the dilemmas of democratic nation building, and the impact of international politics on emerging African states.
HIST 4910, 4920 Afro-American History I, II $(3,3)$ A study of the integral role and contributions of African-Americans to the history and development of the United States. HIST 4910 covers the period from the history of African kingdoms to the end of American slavery. HIST 4920 covers the period from 1865 to the present.

HIST 4930 The Civil Rights Movements in the United States (3) A study of movements in America from 1900 to the present, including African-American, Mexican-American, Native American, and women's organizations.

## Political Science (POLI)

POLI 1010 and POLI 2010 are prerequisites to all upper-level Political Science courses.

POLI 1010 Introduction to Political Sciences (3) The crucial ideas, questions, problems, and methods involved in human attempts to achieve order, justice, and welfare in politics. The ideas, institutions, processes, and behavior associated with modern democratic political systems are emphasized, The meaning of such concepts as freedom, authority, equality, and constitutionalism is explored in depth. Required of all Political Science majors. POLI 1010 is a prerequisite for all upper-level Political Science courses. Course may be applied toward the Social Science requirement of the General Education Core.

POLI 2010 American National Government (3) The foundation, organization, and principles of American national government. Attention is focused on the relations of the citizens to the government and the rights, duties, and obligations of citizen. Required of all Political Science majors. POLI 2010 is a prerequisite for all upper-level Political Science courses. Course may be applied toward the Social Science requirement of the General Education Core.

POLI 2200 Introduction to International Politics (3) The basic concepts and elementary theories of international politics. Tracing the establishment of the modern nation-state system from 1648, the course examines the early historical development of the discipline and the many fundamental power, nation-state, sovereignty, nationalism, interdependence, and integration are explored in depth. Required of all Political Science majors.

POLI 2220 State and Local Government (3) The structure, principles, and operation of the state and local units of government and the nature of intergovernmental relations in the American federal system. Illustrative materials are drawn largely from Tennessee. Required of all Political Science majors.
POLI 2700 Introduction to Intelligence Studies (3). This is a lower division Political Science course open to all students. The course focuses on Intelligence as an academic area of study and explores issues relating to definition, the history of U.S. Intelligence, the intelligence cycle, components and coordination of the intelligence
community, and the intelligence process and relationships with the policymaker. It is subsumed under the larger theoretical framework of U.S. national security.

POLI 3000 History of Political Philosophy (3) Selected political philosophers from classical Greece to 1900, including Plato, Aristotle, Machiavelli, Locke, and Rousseau. All Political Science majors must complete POLI 3000 or 3010.
POLI 3010 Contemporary Political Philosophy (3) Twentieth-century works on the central issues in political philosophy, economic justice, rights, and political authority. All Political Science majors must complete POLI 3000 or 3010.
POLI 3060 Model United Nations (1). The central component of this course is participation in the National Model United Nations conference held every spring in New York City. Students learn about the United Nations and international politics by researching a different country every semester. This course focuses on research, writing, negotiation, and public speaking skills associated with preparing and participating for this conference. The course may be repeated with faculty approval for up to 3 hours of credit. Prerequisite: permission of instructor.

POLI 3100 Research Methodology (3) An introduction to social science research methodology, which involves data collection and processing procedures, computer usage, surveys, statistical analysis, and research design. This course is a prerequisite to POLI 4500. Required of all Political Science majors.

POLI 3150 Public Opinion and Voting Behavior (3) The process by which opinions are formed, the purposes and techniques of propaganda, and the functions and expression of public opinion, all factors which influence how and why people vote.

POLI 3600 Introduction to Comparative Government and Politics (3) Theoretical frameworks which have been used to compare different types of political systems. Course focuses on the issue of what constitutes a valid comparison.
POLI 3620 Comparative European Government (3) An analysis of the government of selected European countries with attention to both theory and practice. Comparison with American institutions is emphasized.

POLI 3630 International Organizations (3) The nature of international organizations and regional organizations. Materials include military, economic, cultural, and political integration experiences, with emphasis on the United Nations and its agencies, the European Economic Community (EEC), North Atlantic Treaty Organization (NATO), Organization of American States (OAS), Organization of African Unity (OAU), and Economic Community of West African States (ECOWAS).

POLI 3650 International Relations (3) Contemporary relations and problems among states of the world and the major factors which underlie and influence these relations.

POLI 3670 American Foreign Policy (3) The forces and factors involved in American foreign policy and the processes through which it is developed.

POLI 3680 Third World Politics (3) An introduction to political and economic change in the Third World to provide an understanding of some of the major problems confronting these nations and the various tools and strategies that their political leaders can use in dealing with those problems. Course investigates some of the major avenues toward political development and assesses the costs and benefits of the approaches discussed.

POLI 3690 Theoretical Approaches to International Relations (3) An in-depth analysis of international relations theory, beginning with the institutionalization of the discipline in 1919 and on to the current state of the subject. The discourses and controversies dominating the field are examined from a paradigmatic perspective, drawing heavily on epistemological approaches to knowledge and focusing on current theoretical debates.

POLI 3700 International Security Studies (3) Analysis of U.S. national and international security affairs in contemporary world politics. While focused on the international system as a whole, course places special emphasis on the U.S. and the evolution of its security policy from both a national and an international perspective. Course is interdisciplinary in approach, drawing from theories, concepts, ideas, and literature from political science, history, philosophy, economics, and law.

POLI 3910 Urban Politics (3) Principal urban problems, their causes, and public policies that deal with them. The course is designed to acquaint students with the ideas of the major writers on such aspects of urban communities as the role and development of cities; their
government, administration, and finance; urban planning and design; poverty and slums; ethnic, race, and class relations; the administration of justice; urban mass transit; and the quality of life in the urban environment.

POLI 3930 International Political Economy (3) A rigorous analysis of the global political economy with emphasis on international trade, balance of payments, theories of development and underdevelopment, the role of multinational corporations, and issues related to migration, the debt crisis, and the environment. The course draws on the extensive literature currently available from a wide range of sources.

POLI 4055, 4056, 4057, 4058, 4059 Special Topics (3) Student- or faculty-generated courses. Scope of subject matter is determined by students and instructor.

POLI 4200 Legislative Process (3) The structure and methods of transacting business in the American Congress and state legislatures: the role of legislatures in the American political system.

POLI 4210 Judicial Process (3). The court systems in the United States, both their role in the political system and the procedures by which they make decisions.

POLI 4220 Parties and Elections (3). The structure and functions of the party system, including nominations, campaigns, and elections. The course examines the role of parties in the political process.

POLI 4230 The Presidency (3) The office of the President of the United States in terms of both the institution and the men who have held that office. Emphasis is placed on the study of the presidency as it has developed in the last half century.

POLI 4240 Government, Public Opinion, and the Press (3) An exploration of the mutual dependence between journalists and public officials and candidates for office. Course examines how each "side" views what is news and how the coverage of various institutions of government affects the image of government in the mind of the citizen.

POLI 4300 Introduction to American Law (3) The development of English common law and its influence on the shape of American law as it has evolved from the colonial era to the present. Basic legal concepts and doctrines as reflected in the operation of the national and state court systems are analyzed, culminating with a general survey of the law in modern American society as it determines the basic rights and liabilities of private persons.

POLI 4310 Constitutional Law: The Federal Government and Separation of Powers (3) The sources, principles, and powers of government in the United States as embodied in the Constitution, as well as judicial decisions in leading cases. The course covers judicial review; the powers of the legislative, executive, and judiciary; and the relations between the federal government and the states.

POLI 4320 Constitutional Law: The Bill of Rights (3) The sources, principles, and powers of government in the United States as embodied in the Constitution, especially the Bill of Rights, as well as judicial decisions in leading cases. The course covers freedom of speech, press, and religion; due process; privacy; and equal protection of the laws.
POLI 4340 Legal Research and Writing (3) An overview of the major types of federal court reports, digests, citations, annotated reports, encyclopedias, treatises, restatements, and law reviews. A factual situation provides the basis for legal research problems.

POLI 4350 International Law (3) The basic legal concepts and principles governing state behavior in the international order, the nature and sources of international law, international agreements, sovereignty of states, and recognition of statehood, jurisdiction, immunities, and responsibility.

POLI 4360 Middle East Politics (3). An introduction to the politics of the modern Middle East. Topics include the history and influence of Islam, the legacy of imperialism, the formation of modern nationstates, the rise of nationalism, political reform, and the role of religion in the politics of the region. In addition, the international politics of the Middle East are also examined.

POLI 4370 Politics of Arms Control (3). This course examines the implications of arms control, focusing on the economic, political, strategic, and technical components. The course also examines the historic impact that arms control has had on the international political system, as well as, its contemporary implications. This will be done for both conventional armaments and weapons of mass destruction (biological, chemical, and nuclear weapons).

POLI 4400 Introduction to Public Administration (3) Principles of public administration structure, organization, financial management, administrative responsibility, and the relation between the administration and other branches of government in the United States. Course is prerequisite to all other courses in the POLI 4400 series.
POLI 4460 Intergovernmental Relations and Regionalism (3) The relations among government agencies throughout the sectors of government (local, state, and national), including the impact of these relations on policy development and the level and quality of citizen participation. Prerequisites: POLI 2220 and 4400.

POLI 4480 Internship (3-12) A supervised internship allowing students to experience firsthand the workings of government and private agencies involved in legal and political processes. Students may receive up to 12 hours of credit for the internship. Only 3 hours, however, may be counted toward the requirements for a major in Political Science. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level Political Science courses.

POLI 4500 Senior Project (3) Directed research on a specific problem. The purpose of the project is to use conceptual knowledge and skills learned in research methodology and knowledge acquired relative to a particular area of political science. Required of all Political Science majors. Prerequisite: POLI 3100.

POLI 4510 Independent Study (3) A supervised project of research or course of guided readings. Topics are selected by enrolled students in consultation with the supervising faculty member. The course may be repeated with faculty approval for up to 6 hours of credit. Prerequisites: Junior or Senior standing and at least 12 hours of upper-level Political Science courses.
POLI 4700 U.S. National Security Policy (3). The course covers the fundamental concepts of security and the varied attributes of American security policy. Students will examine and evaluate the evolution of U.S. national security, an analytical framework for examining national interest, the role of the military in the national security process, intelligence, and security, and contemporary issues relating to national strategy.

POLI 4920 Black Politics (3) The past, present, and future role of blacks in the American political system. The social, economic, and political position of blacks related to that of the larger population is explored. Major works by and about black Americans are studied.

## Department of Languages, Literature, and Philosophy

Lucas Powers, Professor, Chair 104 Humanities Building (615) 963-5641

Faculty: J. Anderson, N. Atwood, C. Bowie, M. Catanzaro, J. Daniel, J. Davis, R. Dixon, J. Hayes, W. Hennequin, J. Irby, M. Mazzone, C. Mojica-Diaz, J. Montmarquet, C. Murillo, J. Parham, E. Phillips, M. Pinkard, L. Powers, A. Rueda-Garcia, P. Shafer, A. Springfield, R. Taylor, J. Thompson, H. Williams, M. Wise

## Mission

The Department of Languages, Literature, and Philosophy offers the Bachelor of Arts degree in English and undergraduate minors in English, Writing, Modern Foreign Languages, and Philosophy and Religious Studies. The Department is an active partner in the Interdisciplinary Studies, Women's Studies, and Teacher Education programs and offers coursework that is integral to the undergraduate general education curriculum. Instruction in the department is informed by the professional expertise of faculty members who contribute to the development of the body of knowledge in their respective disciplines and apply their knowledge and skills in service to local, regional, national, and international communities.

Accreditation: The teacher education program in English is approved by the Tennessee Department of Education. In addition, the University's teacher education program is accredited by the National Council on the Accreditation of Teacher Education (NCATE).

## English

General Statement: The program provides an education in literature and in the English language. A student who majors in English should gain an understanding of the use of the language for both aesthetic and practical purposes, and should therefore be able to use language effectively and recognize its effective use. Through the study of literature, the student also becomes familiar with some of the great minds in history and the cultures of which they were a part.

The English major, as a participating WRITE Program, is committed to providing students with the opportunity to develop the written communication skills necessary to succeed in their discipline and vocation. Working in partnership with the WRITE Program, the English major builds on and promotes the transference of writing skills from the general education curriculum through specifically sequenced core courses.

English majors who successfully complete the distribution requirements for upper-division (3000 and 4000 level) courses in English will be able to:

1. Recognize most of the major authors, works, themes, and styles associated with at least two of the following periods of English literature, where "major" is understood to mean "of canonical and/or historical significance":
a. American Literature
b. African American Literature
c. British Literature before 1800
d. British Literature after 1800
2. Utilize advanced reading comprehension skills, including the ability to analyze component parts of a literary text
and to interpret figurative language, such as metaphor and symbolism, and stylistic or tonal nuances such as irony or satire.
3. Recognize and apply the basic methodologies of most of the following contemporary modes of literary criticism: New Criticism, Formalism, Psychoanalysis, Reader Response, Marxism, Feminism, New Historicism, Cultural Studies, and Postcolonial Studies.
4. Understand at least one extensive example of how literature interacts with the intellectual, cultural, and/or historical contexts within which it emerges.
5. Utilize advanced techniques of composition, such as:
a. Interpretation of and response to the rhetorical situation
b. Summary of primary or secondary sources
c. Incorporation of quotation and paraphrase from primary and secondary sources to support analytical and interpretive arguments
d. Proper use of MLA format for citation and documentation of sources
e. Basic conventions of Technical, Professional, Creative, and/or Academic Research Writing
6. Understand fundamental concepts associated with the historical development, and/or modern structure of the English language.
7. Participate actively in collaborative hermeneutics, such as large and small group discussions about how to interpret or respond to literary texts, ideas, or other course content.

Students must earn at least a grade of C in all classes required to complete the English major. English majors are also expected to take ENGL 2310 and 2320, World Literature I and II (or ENGL 2312 and 2322, Honors World Literature I and II), as part of the general education core. Since English offers only the B.A. degree, students must demonstrate competency at the second-year level in a single foreign language.

Students may earn secondary school certification in English by completing the requirements of the general education and professional education cores, as well as ENGL 3710, Methods of Teaching High School English, and ENGL 3720, Adolescent Literature. The other certification requirements are spelled out in the four- year curriculum. Successful completion of the certification program results in licensure for grades 7-12. Students ordinarily enter the certification program in their sophomore year. Students must apply in writing to the College of Education for formal admission to the certification program.

The Tennessee Board of Regents Teacher Education Redesign Initiative, Ready2Teach, will officially begin in the fall semester of 2013. Ready2Teach requires residency in K-12 schools during the senior or final year (fall and spring) of undergraduate teacher licensure programs. The residency year includes Residency I during the fall semester and Residency 2 during the spring semester. Residency 1 will include methods courses and 90+ hours field study in K-12 schools. Residency 2 requires a full semester ( 16 weeks) of student teaching. Residency 1 will only be offered in the fall while Residency 2 will only occur in the spring. This initiative applies to all undergraduate teacher education candidates pursuing teacher licensure. All programs of study will be changed to reflect the new program beginning in the fall semester of 2013. Students are required to seek advisement regarding their licensure programs as early as possible during their academic career at Tennessee State University to ensure that all prerequisite courses and Praxis exams are complete in preparation for Residency.

The Department offers two other programs in English: the English minor and the minor in Professional Writing. Also, the Department encourages students to take a double major, combining English with another major. Students interested in any of these programs should consult an English advisor or the Department Chair.

| Departmental Requirements - 30 Semester Hours |  | For Minor in |
| :--- | :--- | :--- | :--- |
| For Bachelor of Arts |  |  |
| English |  | Philosophy | beliefs and values, and it helps develop the capacity to think critically and carefully, a particularly valuable ability in our increasingly complex world. Studying philosophy also provides a sense of the evolution of human thinking about ourselves and our world.

Students who wish to concentrate in Philosophy may do so by fulfilling the requirements for the Interdisciplinary Studies program in Liberal Arts and take at least 15 upper-level hours in Philosophy, including two of the courses in the History of Philosophy sequence (PHIL 3100, 3110, 3120) and Logic and Critical Thinking (PHIL 2500). Other courses should be selected in consultation with a Philosophy advisor.

ENGL 1010 Freshman English I (3). An introduction to the fundamentals of written composition and communication through the study of illustrative essays, as well as an introduction to the reading and critical analysis of essays. Grammar and mechanics, insofar as they are an integral part of developing proficiency in writing, are covered in the course. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Center. Successful completion of 1010 is a prerequisite for English 1020. All degree-seeking students must earn at least a C in this course.

ENGL 1020 Freshman English II (3). An introduction to more advanced techniques of composition through the study of literature. The analysis and explication of literature serve as topics for discussion, study, and writing of themes. Special attention is paid to the writing of the literary review and the research paper. Those students who do not demonstrate satisfactory performance in the use of grammar and mechanics are required to attend the Writing Center. Prerequisite: successful completion of English 1010. All degreeseeking students must earn at least a C in this course.
ENGL 1012, 1022 Honors Freshman English I, II (3, 3). An Honors Course in Freshman Composition designed for students able to work at an advanced level. Enrollment is restricted to students in the University Honors Program. All degree-seeking students must earn at least a C in each of these courses.

ENGL 2000 Advanced Composition (1-3) (Formerly ENG 200). A workshop approach to written composition through group and individual project production. The focus is to demonstrate well formed expository communications through critical analysis, writing skill, technical development, all brought to bear in a final paper. Collaborative learning and writing models in a seminar approach support the coursework.

## All of the following 2110-2322 courses satisfy the sophomore literature and/or Humanities requirement of the General Education Core.

ENGL 2110, 2120 American Literature (3, 3) (Formerly ENGL 2010, 2020). A survey of American literature from the first European settlements to the present time. The first semester covers from the beginning to the Civil War, and the second covers the period since the Civil War.

ENGL 2310, 2320 World Literature (3, 3) (Formerly ENGL 2011, 2021). A survey of world literature from the beginnings in the Far East and Middle East until the present time. The first semester treats literature through the Renaissance (approximately 1650), and the second treats the Renaissance to the present.

ENGL 2012, 2022 Literary Genres (3, 3). An approach to literature from the point of view of the genre, or type, of work to be studied. The first semester takes up the short story and the novel, the second poetry and drama.

ENGL 2013, 2023 Black Arts and Literature (3, 3). A study of the contributions of black artists and writers to world culture, especially American culture. The first semester treats oral tradition, poetry, drama, and music; the second semester covers the short story, essay, and novel.

ENGL 2210, 2230 Survey of English Literature I, II $(3,3)$ (Formerly ENGL 2014, 2024). A survey of English literature from its origins until the present. The first semester concludes with the end of the eighteenth century, and the second semester covers the period since 1800.

ENGL 2312, 2322 Honors World Literature I, II (3, 3) (Formerly ENGL 2018, 2028). An analytical reading of selected poetry, prose, and drama from the nations of the world. The subject matter of both semesters is arranged chronologically, with that of the first ranging from the ancient Chinese through the Renaissance (approximately 1650 CE), and that of the second from the Age of Classicism and Reason through the twentieth century. Limited to students in the University Honors Program.
ENGL 3000 Expository Writing (3) (Formerly ENG 300). The reading and examination of essays representing the major expository types, with particular attention to rhetorical principles, styles, and structure, resulting in the writing of essays illustrating these types. The final project is the preparation of the research report, with emphasis on the collection of materials, analysis, and organization. Required of all English majors.

ENGL 3010 Critical Approaches to Literature (3) (Formerly ENG 301). A writing-intensive introduction to major critical theories with emphasis on application to interpretation of literary works. Students interpret a number of literary works drawn from different genres and periods, applying several different theoretical perspectives, such as feminism, new historicism, Marxism, psychoanalysis, and cultural and gender studies. Prerequisites: ENG 1010, 1020, 2011 (or 2018), and 2021 (or 2028). The course is required of all English majors and is a prerequisite or co-requisite for English majors to all upper-division courses in literature.
ENGL 3105, 3106, 3107 Technical Report Writing (3) (Formerly ENG 310E, 310C, 310S). A study of fundamentals of written reports in a variety of professional fields, with the emphasis on grammar, sentence structure and style, as well as on specialized techniques. 3105 focuses on reports required in professional engineering. 3106 is the study and preparation of forms and reports required of students majoring in Criminal Justice. 3107 is the study and preparation of forms and reports required of social workers. Acquaintance with documents of various agencies is stressed.
ENGL 3110 Creative Writing: Short Story (3) (Formerly ENG 311). A workshop in short story writing. The course examines the techniques and problems involved in writing the short story and places emphasis on the use of the senses and the writing about the experience of living.

ENGL 3120 Creative Writing: Poetry (3) (Formerly ENG 312). A workshop in writing poetry. The course examines the techniques involved in writing poetry, placing emphasis on the writing of varied poetic types and relating poetry to other forms of art.

ENGL 3150 The Film (3) (Formerly ENG 315). A study of films: their makers, their message, and their appeal. Students not only view films but also read articles and books about movies.

ENGL 3290 Survey of British Literature I (3) (Formerly ENG 329). A survey of important British writers beginning with the Old English tradition and continuing to the Romantic Period.

ENGL 3300 Survey of British Literature II (3) (Formerly ENG 330). A continuation of ENG 3290 beginning with the Romantic Period and concluding with the twentieth century.

ENGL 3310 British Literature from the Renaissance to the Restoration (3) (Formerly ENG 331). A study of representative selections from 1500 to 1660 with concentration on non-dramatic literature.

ENGL 3320 Poetry and Drama of the Restoration and Eighteenth Century (3) (Formerly ENG 332). A study of selected poetry, prose, and drama from the ages of Dryden, Pope, and Johnson.

ENGL 3330 Prose of the Eighteenth Century (3) (Formerly ENG 333). A study of the attempts of journalists and novelists to create myths or moral models for their age in a series of social and cultural fictions. Readings in Addison and Steele, Johnson, Fielding, and Richardson.

ENGL 3410 Literature of the Romantic Movement (3) (Formerly ENG 341). A study of representative selections from 1798 to 1832. Attention is given both to poetry and prose.

ENGL 3510 Twentieth-Century British Literature (3) (Formerly ENG 351). A study of the major trends in poetry, drama, and the novel of the twentieth century. Emphasis is placed on themes, techniques, and social criticism. Representative British, Irish, and Commonwealth writers are included.
ENGL 3610 American Literature I (3) (Formerly ENG 361). A study of major American writers and literary movements, including such writers as Edwards, Franklin, Emerson, Thoreau, Hawthorne, Melville, Douglass, Dickinson, and Whitman, and such movements as Puritanism, the Enlightenment, Romanticism, and Transcendentalism.

ENGL 3620 American Literature II (3) (Formerly ENG 362). A study of literary trends since the Civil War, with emphasis on such major figures as Twain, Crane, Dreiser, Frost, Eliot, Faulkner, Fitzgerald, Ellison, Lowell, Bishop, Baldwin, Rich, and Bellow and such movements as realism, naturalism, modernism, and postmodernism.
ENGL 3630 The American Novel (3) (Formerly ENG 363). A study of representative works designed to reflect formal developments in the novel, as well as intellectual and moral concerns of the American people.

ENGL 3640 Literature of Black Life in America (3) (Formerly ENG 364). A study of black literature from its inception in America to current times. Particular emphasis is placed on biography, poetry, the essay, and short fiction.

ENGL 3650 The Contemporary Black Novel (3) (Formerly ENG 365). A study of novelists such as James Baldwin, Ralph Ellison, Margaret Walker, Toni Morrison, and John Killens, in terms of literary merit and social milieu.

ENGL 3680 Contemporary American Poetry (3) (Formerly ENG 368). Poetry from 1960 to the present.

ENGL 3690 Contemporary American Fiction (3) (Formerly ENG 369). Novels, short stories, and experimental fiction, 1950 to present, by such authors as Ellison, Barth, Heller, Nabokov, and Pynchon.

ENGL 3710 Methods of Teaching High School English (3) (Formerly ENG 371). A course in the methods of teaching English in the secondary schools. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all English majors in the Teacher Education Program. Prerequisite: official admission to Teacher Education Program.
ENGL 3720 Adolescent Literature (3) (Formerly ENG 372). A survey of literature relevant to the interest and concerns of young adults. Required of English majors enrolled in the Teacher Education Program.
ENGL 3730 Children's Literature (3) (Formerly ENG 373). A course offering prospective teachers of the primary grades an opportunity to become familiar with literature suited to the needs and tastes of children. Principles that underline selection of children's literature for classrooms and libraries are considered. Required of all candidates for certification in Elementary Education.
ENGL 3800 African Literature (3). This course is a survey of SubSaharan African Literature written and translated into English. The course offers an examination of the themes, motifs, style, and structure of the literature. The literature will be studied in relationship to the cultural, social, historical, political, and economic issues which have served to inform the development of African literary traditions. While the primary focus of the course is Black African writers from $20^{\text {th }}$ and $21^{\text {st }}$ centuries, limited exposure to North African Literature, Literature of non-indigenous groups, and Oral Traditions is provided.

ENGL 3850 Caribbean Literature (3). This course is an introductory survey of Caribbean Literature written and translated into English. The course provides an examination of the themes, motifs, style, and structure of major authors of the Caribbean from the Colonial period to the present. While the primary focus of the course is West Indian Literature, literature from other parts of the Caribbean will be included. The course recognizes the diversity and complexity of traditions that inform literature of the Caribbean.
ENGL 3860 Women in Literature (3) (Formerly ENG 386). A course designed to investigate the image of women in literature as it relates to sexual roles, judgments, choices, and equality; and to broaden the students' knowledge of some of the values, lifestyles, goals, and achievements of women in the past and today.

ENGL 3900 Languages and Linguistics (3) (Formerly ENG 390). A course to prepare students for the study and teaching of a language by introducing them to the scientific study of language. Comparisons between English and various other languages lay a foundation for a career as a teacher of English as a second language or a teacher of a foreign language. Same as MFLA 3900.

ENGL 4000 Senior Seminar (3) (Formerly ENG 400). A course designed to complete the English major by inquiring into the purposes and methods of the liberal arts in general and literary study in particular. Attention is paid to the resources for literary scholarship and criticism. Required of all English majors.
ENGL 4010 Special Topics (3) (Formerly ENG 401): Faculty generated course, with subject matter to be determined by instructor. May be taken twice with different topics.
ENGL 4100 History of the English Language (3) (Formerly ENG 410). A study of the development of the English language from the beginning to modern times. Some attention is given to phonetics and to the elementary principles of linguistics.
ENGL 4110 Current English (3) (Formerly ENG 411). New trends in teaching English and their relationship to significant trends in the past. Students develop projects that are used as supplementary texts in the course.

ENGL 4120 Modern English Grammar (3) (Formerly ENG 412). An introduction to the recent theories as a tool for analyzing literature and composition.

ENGL 4130 Advanced English Grammar (3) (Formerly ENG 413). Traditional approaches to grammar. The course addresses the needs of student writers and student teacher interns who need knowledge of the development and structure of the English language and review of traditional grammar in light of their present and future professional goals. (Required of candidates for secondary certification in English.)
ENGL 4140 Software Technical Writing I (3) (Formerly ENG 414). A basic course in the writing of computer software manuals. ENG 310E is recommended as preparation. Prerequisite: permission of instructor.
ENGL 4150 Software Technical Writing II (3) (Formerly ENG 415). Advanced documentation techniques for computer software. Prerequisite: successful completion of ENG 4140.
ENGL 4160 Writing for Publication (3) (Formerly ENG 416). Writing principles and practices for a variety of professional and popular audiences.

ENGL 4200 Chaucer (3) (Formerly ENG 420). An introduction to the works of Chaucer, with emphasis on the background of the age and on development of Chaucer as a literary artist.
ENGL 4210 The English Novel (3) (Formerly ENG 421). A selection of English novels from the eighteenth century to the present.

ENGL 4230 Literature of the Middle Ages (3) (Formerly ENG 423). Studies in prose and poetry of the Middle Ages, including Beowulf and works of the Pearl poet, Langland, and Malory.

ENGL 4320 Shakespeare (3) A study of the principal plays of Shakespeare with some attention to the sonnets.
ENGL 4510 The English Novel: Twentieth Century (3) (Formerly ENG 451). Selections from the works of Conrad, Forster, Lawrence, Joyce, Woolf, and others.
ENGL 4600 African-American Women Writers (3). A course examining African-American women's literary tradition with primary focus on fiction writing in the 20th and 21st centuries, but will include writing from other periods, as well as poetry, drama, essays and criticism.

ENGL 4724 Student Teaching in the Secondary Schools (12) (Formerly ENG 472). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of English. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently.
ENGL 4800 Introduction to Literary Criticism (3) (Formerly ENG 480). Major critical doctrines from antiquity to the present, with emphasis on twentieth-century movements.

ENGL 4840 History and Literature of the British Empire, 1850-Present (3). Introduces students to some of the major social, cultural, and political developments associated with the British Empire from 1850 to the present and asks them to think critically and analytically about the relationships between these developments. Through lecture, film, and discussion of literature and other primary sources of the period, the course explores the impact of Empire on both the British and the societies under their control. Also focuses on the challenges of developing post-colonial cultures and identities in the aftermath of foreign rule. Prerequisites: ENGL 1010, 1020 and admission to upper division English courses. Cross-listed with HIST 4840. Limited to 25 students.

ENGL 4900 Undergraduate Readings and Research (3) (Formerly ENG 490). Individual study and research under faculty guidance. May be repeated once, for a total of six hours.

ENGL 4910 Advanced Story Writing (3) (Formerly ENG 491). An advanced workshop in story writing, focusing on student work. The course covers such elements of a story as plot, character development, and scene-making. Students learn about these elements through the process of writing their own stories and studying stories by professional writers.
ENGL 4920 Advanced Poetry Writing (3) (Formerly ENG 492). An advanced workshop in poetry writing, focusing on student work. The course covers such elements of poetry as rhythm, lineation, imagemaking, and figurative language. Students learn about these elements through the process of writing their own poems, studying poems by professionals, and delivering oral reports.

ENGL 4950 Research Writing (3) (Formerly ENG 495). A course designed for liberal arts and technical/professional majors to extend investigative and research skills necessary for senior projects and other major papers in the various disciplines. Final projects focus on details in information management and articulation through a variety of documentation styles. Electronic writing for data and production is required. A writing-intensive course.

ENGL 4994 Internship in Professional Writing (3-9) (Formerly ENG 499). Professional experience in a writing or publishing position. Students must write a report on their experience, and work supervisors must also submit a report. Open only by prior arrangement with instructor.

## French (FREN)

FREN 1010 Elementary French I (3). A beginning course in French. The four skills of listening comprehension, speaking, reading, and writing are taught, with an emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.
FREN 1020 Elementary French II (3). Continuation of FREN 1010, with further development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in
everyday situations. Prerequisite: FREN 1010 or an equivalent placement examination score. Course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

FREN 1210 Intensive French Review (3) (Formerly FR 121). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis is on oral proficiency in everyday situations. Prerequisite: two years of high school French or equivalent placement examination score.
FREN 2010 Intermediate French I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: FREN 1020, 1210, or equivalent placement examination score.

FREN 2020 Intermediate French II (3). Further development of the listening comprehension and speaking skills with an emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the student to an intermediate level of performance in French. Prerequisite: FREN 2010 or equivalent placement examination score.

FREN 2025 Business French (3). Development of intermediate level skills in grammar and vocabulary for communication in both oral and written form for business purposes. Students learn and apply technical vocabulary related to business practice. Prerequisite: FREN 2010.

FREN 3000 Atelier de Francais/French Workshop (3) Mastery of spoken French language and practice of correct pronunciation through performance and creation of short theatrical texts in French, as well as guided expressive reading of poetry and drama. Prerequisite: FREN 2020 or FREN 2025.

FREN 3020 French Pronunciation and Conversation (3) (Formerly FR 302). Intensive practice in the development of oral skills in French through discussion of a wide variety of topics and common situations. Prerequisite: FREN 2020 or FREN 2025 or equivalent placement examination score. Course may be taken concurrently with FREN 3000, 3010, or 3030.

FREN 3030 English-French Translation (3). Written translation of a variety of texts and exercises, from English to French. Reinforcement of French grammar and mastery of vocabulary, syntax, and stylistics. Prerequisite: FREN 2020 or FREN 2025 or permission of instructor.

FREN 3035 French-English Translation (3). Written translation of a variety of texts and exercises, from French to English. Reinforcement of French grammar and mastery of vocabulary, syntax, and stylistics. Prerequisite: FREN 2020 or FREN 20205 or permission of instructor.

FREN 3040 French for Professions (3). Contextual, cultural, and linguistic analysis of business and professional practices in the French or Francophone world. Development of skills in grammar and vocabulary for communication in different business contexts. Emphasis may be on French for criminal justice, engineering or health professions. Prerequisites: FREN 2010 or permission of instructor.

FREN 3050 Special Topics on the Contemporary French World (3) (Formerly FR 430). Rotating topics of special interest relating to the French world. Specific topics announced in advance. Usually taught in English. Prerequisite: FREN 2020 or FREN 2025 or permission of instructor.

FREN 3120 French Cultural Studies (3). A study of major events or trends in contemporary French culture and society. Students develop interpretive and interpersonal skills through analysis and discussion of a wide range of artistic, cultural, and technological resources, including film, theater, and the media. Prerequisite: FREN 2020 or FREN 2025 or permission of instructor.

FREN 3130 Frncophone Cultural Studies (3). A study of major events or trends in contemporary Francophone cultures and societies (other than Metropolitan France). Students develop interpretive and interpersonal skills through analysis and discussion of a wide range of artistic, cultural, and technological resources, including film, theater, and the media. Prerequisite: FREN 2020 or FREN 2025 or permission of instructor.

FREN 4900 Study Abroad (3-6). A short study program (for example, summer study abroad) in a Francophone country designed to provide students with a total French-speaking environment which will allow a broadening of knowledge and appreciate of the French language and culture. Prior approval of program required. May be repeated for credit. Prerequisite: Permission of instructor.

## International Student Exchange Program (ISEP)

The following courses are limited to students who have entered into contractual agreement with the International Student Exchange Program to study abroad. After the students have completed their foreign study, the actual courses they have completed at the foreign university will be substituted for the ISEP courses. For details of program, consult Department Chair.

ISEP 1010, 1020, 1030, 1040, 1050, 1060 Student Exchange Program (3, 3, 3, 3, 3, 3) (Formerly ISEP 101, 102, 103,104, 105, 106.)

## Modern Foreign Languages (MFLA)

MFLA 3710 Methods of Teaching Foreign Languages (3) (Formerly MFL 371). A course which acquaints students with methods, materials, and texts. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in teaching a foreign language.

MFLA 3900 Languages and Linguistics (3) (Formerly MFL 390). A course to prepare students for the study and teaching of a language by introducing them to the scientific study of language. Comparisons between English and various other languages lay a foundation for a career as a teacher of English as a second language or a teacher of a foreign language. Same as ENGL 3900.
MFLA 4500 Senior Project (3) (Formerly MFL 450). Individual research and project-writing. Prerequisites: at least 12 upper-level hours in French or Spanish, or permission of instructor. Required of all students majoring in Foreign Languages.

MFLA 4700 Independent Study (3) (Formerly MFL 470). Individual research project carried out under supervision of faculty member. Project requires extensive written report in the language of the topic. Prerequisite: permission of instructor. May be repeated once, for a total of six hours.

MFLA 4724 Student Teaching in the Secondary Schools (12) (Formerly MFL 472). A semester-long experience of supervised practice teaching, appropriately divided between middle school and high school. Required of all students seeking certification in the teaching of French or Spanish. Prerequisite: successful completion of all certification courses except EDCI 4705, which is taken concurrently.

## Philosophy (PHIL)

PHIL 1030 Introduction to Philosophy: Moral Issues (3) (Formerly PHIL 2010). A course addressing many of the most pressing ethical issues we face, such as euthanasia, abortion, preferential hiring, sex, animal rights, mass starvation, punishment, violence, pacifism, and civil disobedience. May be used toward satisfying University humanities requirement.

PHIL 2020 Introduction to Philosophy-Enduring Problems (3). A course including historical and recent sources on the perennial issues in philosophy, including the justification and significance of religious beliefs; knowledge and truth; materialism; human nature; free-will and determinism. May be used toward satisfying University humanities requirement.

PHIL 2021 Introduction to Film (3). Aesthetic and philosophical issues in film theory and criticism; principles of film criticism; film and other art forms; and the relation of the audience to film. Course aims toward understanding and appreciation of a major art form. Films exemplifying particular techniques and movements are viewed and discussed.

PHIL 2022 History of Film (3). An historical study of the development of film as an art medium.

PHIL 2500 Logic and Critical Thinking (\#) (Formerly PHIL 250). Informal fallacies in ordinary life, e.g., politics, editorials, advertising; language and its uses; analyzing extended arguments; introduction to deductive logic.

PHIL 2510 Symbolic Logic (3) (Formerly PHIL 251). Modern deductive logic, propositional and quantificational; philosophy of logic.

PHIL 3100 History of Philosophy, Ancient (3) (Formerly PHIL 310). Development of philosophic thought from the Greeks to the thirteenth century.

PHIL 3110 History of Philosophy, Modern (3) (Formerly PHIL 311). Modern philosophy from Descartes through Kant.

PHIL 3120 History of Philosophy, Contemporary (3) (Formerly PHIL 312). Philosophy from Hegel to the present.

PHIL 3300 Ethical Theory (3) (Formerly PHIL 330). Traditional and contemporary ethical theories; the meaning and justification of ethical language.

PHIL 3350 Business Ethics (3) (Formerly PHIL 335). Survey of major ethical issues arising in business: corporate social responsibility, corporate loyalty, government regulation and public interest, advertising, environmental responsibilities, preferential hiring, free enterprise, and social welfare.

PHIL 3360 Medical Ethics (3) (Formerly PHIL 336). A detailed consideration of various ethical issues in medicine and health care, including death and patients' rights, abortion, truth-telling, experimenting on human beings, religious conflicts, and the rights to medical resources.

PHIL 3600 African-American Philosophy (3) (Formerly PHIL 360). Issues in ethics and social philosophy, including foundational arguments of the civil rights movement, cultural diversity, and AfricanAmerican approaches to philosophy.
PHIL 4100 Philosophy of Religion (3) (Formerly PHIL 410). The rationality of religious beliefs and practices, religious experience, the role of faith, religious language.
PHIL 4200 Philosophy of Law (3) (Formerly PHIL 420). Problems in the nature and justification of legal systems; natural law and legal positivism; theory of punishment.
PHIL 4400 Special Topics (3) (Formerly PHIL 440). Student- or faculty-generated course, with scope of subject matter to be determined by students and instructor.
PHIL 4500 Undergraduate Readings and Research (3) (Formerly PHIL 450). Individual study and research under faculty guidance. Prerequisites: 12 hours of upper-level philosophy and permission of instructor.

## Religious Studies (RELS)

RELS 2010 Introduction to Religious Studies (3). Current issues in religious studies: ethics, theology, and history of religion. May be used toward satisfying the University humanities requirement.

RELS 2011 World Religions (3). Introduction to selected themes in world religions. May be used toward satisfying the University humanities requirement.

RELS 3100 The Old Testament (3) (Formerly RS 310). A study of the origins, literature, beliefs, and ethics of the Hebrew Bible/Old Testament, along with the ancient Near Eastern cultural environment of Israel, Africa, Asia, and southern Europe which had major impact on its development. Formerly RS 210.

RELS 3110 The New Testament (3) (Formerly RS 311). An exploration of the history, literature, and ethics of the early Christian movement in its Greco-Roman environment, using Koine GreekEnglish translation of the biblical text as foundation.

RELS 3300 Religion in America (3) (Formerly RS 330). The role of religious institutions and practices in American history.

RELS 4100 Contemporary Religious Thought (3) (Formerly RS 410). Major themes, issues, and thinkers.
RELS 4200 African Roots in Christianity (3) (Formerly RS 420). The literary, historical, cultural, philosophical, and biblical contributions from the African continent to Christianity. Prerequisite: RELS 3100, or RELS 3110, or permission of instructor.

## Spanish (SPAN)

SPAN 1010 Elementary Spanish I (3). A beginning course in Spanish. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. For students with no previous knowledge of the language. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPAN 1020 Elementary Spanish II (3). Continuation of Spanish 1010. The four skills of listening comprehension, speaking, reading, and writing are taught with emphasis on oral proficiency in everyday situations. Prerequisite: two years of high school Spanish or equivalent placement examination score. This course may be applied toward removing a high school deficiency in foreign languages, in which case it does not yield credit toward the undergraduate degree.

SPAN 1210 Intensive Spanish Review (3) (Formerly SPN 121). Intensive review of the language to continue the development of the four skills of listening comprehension, speaking, reading, and writing. Emphasis on oral proficiency in everyday situations. Prerequisite: two years of high school Spanish or equivalent placement examination score.
SPAN 2010 Intermediate Spanish I (3). Development of vocabulary, syntax, grammar, and oral and writing skills to incorporate these elements into a satisfactory intermediate level of performance in the language. Prerequisite: SPAN 1020, 1210, or equivalent placement examination score.

SPAN 2020 Intermediate Spanish II (3). Further development of listening comprehension and speaking skills with emphasis on reading and writing. Course incorporates vocabulary, syntax, and grammar to bring the students to an intermediate level of performance in Spanish. Prerequisite: SPAN 2010 or equivalent placement examination score.

SPAN 2025 Intermediate Spanish II: Spanish for the Professions (3). Development of Spanish intermediate level skills in speech patterns, grammar and vocabulary for appropriate communication in both oral and written form. Emphasis on topics and vocabulary for business, criminal justice, engineering and health professions. May be taken instead of SPAN 2020, not in addition to SPAN 2020. Prerequisite SPAN 2010 or equivalent placement examination score.

SPAN 3050 Advanced Spanish Language (3). Development of advanced level skills in Spanish. Different language modalities (listening, speaking, etc.) and grammar components (phonetics, syntax, discourse, etc.) will be practiced in real life contexts. Prerequisite: SPAN 2020, or SPAN 2025, or equivalent placement examination score.

SPAN 3100 Advanced Spanish for the Professions: Business (3). Contextual cultural and linguistic analysis of business practices in the Spanish-speaking world. Students will be working at a language
advanced level as they interpret, examine, and discuss authentic business documents. Prerequisite: SPAN 3050 or permission of instructor.

SPAN 3101 Advanced Spanish for the Professions: Engineering (3). This course is designed to develop advanced level skills in Spanish for appropriate professional communication in both oral and written form. The course focus is on engineering vocabulary, basic engineering issues, and culture. Students will interpret, examine, and discuss authentic engineering documents, case studies, and situations in Spanish. Prerequisite: SPAN 3050 or consent of the instructor.

SPAN 3102 Advanced Spanish for the Professions: Healthcare (3). This course is designed to develop advanced level skills in Spanish for appropriate professional communication in both oral and written form. The course focus is on healthcare topics, and culture. Students will interpret, examine, and discuss authentic healthcare documents, case studies, and situations. Prerequisite SPAN 3050 or consent of the instructor.

SPAN 3103 Advanced Spanish for the Professions: Law Enforcement(3). This course is designed to develop advanced level skills in Spanish for appropriate professional communication in both oral and written form. The course focus is on law enforcement topics and culture. Students will interpret, examine, and discuss authentic law enforcement documents, case studies, and situations. Prerequisite: SPAN 3050 or consent of the instructor.

SPAN 3200 Spanish Cultural Studies (3). This course is an overview of the most representative events in contemporary Spanish culture and society. Students develop interpretive, presentational and interpersonal skills as they engage in textual analysis and discussion of a variety of Spanish cultural products, including films, interviews, and newspaper articles. Prerequisite: SPAN 3050 or permission of instructor.

SPAN 3210 Latin American Cultural Studies (3) This course is an overview of the most representative events in contemporary Latin American culture and society. Students develop interpretive, presentational and interpersonal skills as they engage in textual analysis and discussion of a variety of authentic cultural productions including films, interviews, and newspaper articles. Prerequisite: SPAN 3050.

SPAN 3300 Special Topics on Spanish and LA Studies (3). In depth study of special interest topics in Spanish and Latin American culture and civilization (e.g. Spanish film, African influence in Latin American culture, art, literature, religion). May be taken more than once. Prerequisite: SPAN 3050 or consent of the instructor.
SPAN 3400 Introduction to Spanish Translation and Interpretation (3) A practical bilingual Spanish-English course that focuses on the nature, principles and methods of translation and interpretation. Prerequisite: SPAN 3200, 3210, or consent of the instructor.

SPAN 3410 Advanced Spanish translation and interpretation (3). English-Spanish and Spanish-English advanced level translation of literary, commercial, and technical content. Students develop advanced level language and cultural skills as they apply the translation principles and methods acquired in SPAN 3400. Opportunities for translation of general and specialized texts, as well as for editing, professional management, quality control, and cultural analysis are provided. Prerequisite: SPAN 3200, 3210, 3400 or consent of the instructor.
SPAN 4900 On-Site(s) Hispanic Culture (3-7) (Formerly SPN 490). Cultural and linguistic enrichment through travel and study in a Spanish-speaking country.

## Department of Music

## Robert L. Elliott, D.M.A., Department Chair 104 Performing Arts Center Telephone 615-963-5341

Faculty: M. Crawford, S. Daniels, T. Davis, R. McDonald, D. Nettles, L. Rasmussen, P. Reeves, J. Tackett, R. Todd.

## Mission Statement

The Department's mission is to contribute to the comprehensive formation of all university students through multi-faceted engagement with music. By facilitating expansion of the general student's aesthetic perspective and by nurturing the music major's development in performance,
music education, scholarly inquiry into both western and world music, and technological innovation, the Department aids students in becoming highly motivated, life-long learners.

## Goals:

1. Provide both undergraduate and graduate programs that prepare majors for successful futures as elementary and secondary educators, performers, graduate students, researchers and music industry professionals.
2. Serve the university as a whole by 1) enhancing its cultural life with a wide array of musical performances; and 2) providing non-majors with numerous opportunities to learn about and participate in the making of music.
3. Establish and develop professional relationships with other musicians at the local, regional, national and international levels in order to provide students with an accurate perspective on and opportunity to interact with the global community of musicians.
Objectives: By the end of their course of study, students will:
4. possess a fundamental understanding and mastery of the practical skills necessary in order to successfully pursue a music career, whether it be in education, performance or the music industry.
5. have contributed significantly to the cultural and aesthetic welfare of both the university and of the community at large by providing a broad variety of musical performances.
6. be able to demonstrate critical thinking skills in both written and verbal format, within both a Western and a global context.
7. have developed into self-motivated, life-long learners who are fully capable of making valuable contributions to society.
Degree Programs: The Department offers the Bachelor of Science in Music Degree with concentrations in 1) Instrumental/General Music Education, 2) Vocal/General Music Education, 3) Liberal Arts, and 4) Commercial Music with emphases in Business, Technology and Performance. In cooperation with the College of Education's Department of Teaching and Learning, the Department of Music also offers the Master of Education in Curriculum and Instruction in Music. Please refer to the Graduate Catalog for more information.
Accreditation: The Department of Music is accredited by the National Association of Schools of Music, the official accrediting agency for schools of music in the United States. The teacher certification programs in Music are approved by the Tennessee Department of Education. In addition, the National Council on the Accreditation of Teacher Education (NCATE) has extended national accreditation to the teacher certification program of the University.

General Education Core: Specific requirements for the General Education Core, which consists of 41 credit hours plus Orientation, vary for each of the above-mentioned Degree Programs. These requirements are available at www.tnstate.edu/music.
Music Core: Specific Music Core requirements for each of the above-mentioned Degree Programs are available at www.tnstate.edu/music.

Additional Requirements for Music Majors: Each student must declare a primary applied area of performance and focus in this area as indicated in each degree plan. Students must present recitals as noted in the specific degree program.
A piano skills diagnostic test will be administered upon admission and the student will be advised as to the best manner of meeting the required piano proficiency. Each music major is encouraged to experience a variety of additional ensembles, whether enrolled for credit or for zero credit.

## Teacher Certification for Music Education Majors

Music Education majors who seek teacher certification in Music must make official application for admission to the Teacher Education Program, located in the College of Education. They must have a minimum 2.75 cumulative grade point average at the time of application and must pass the Core Academic Skills Test. Students who have earned a 22 or better on the ACT or a 1020 or better on the SAT are exempt from the Core Academic Skills Test. Formal admission to the Teacher Education Program is a prerequisite to enrolling in all
upper-level certification courses. A year-long practicum of Residency 1 and Residency 2 is required of all candidates for certification. For a complete list of requirements for admission to and retention in the Teacher Education Program, see College of Education section of this Catalog.

Students are required to seek advisement regarding their licensure programs during their Freshman year at Tennessee State University to ensure that all prerequisite courses and teacher licensure exams are completed as required.
It is mandatory that students confer with departmental advisors prior to registering each semester.

## Music Minor Requirements

A minimum of 18 semester hours is required, including:
Core: (14 credit hours)
MUSC 1010
Music Appreciation
3
MUSC 1xxx (prerequisite) Applied Music I Applied Music II
Aural Skills I
Music History II
MUSC 1250
MUSC 3380
Choice of Major Ensembles(repeatable for credit) 2 or 3
MUSC 1510/3510 Commercial Music Ensemble
MUSC 2010 Marching Band
MUSC 2095/3095 Wind Ensemble
MUSC 2096/3096 Concert Band
MUSC 2098/3098 Orchestra
MUSC $3070 \quad$ University Choir
MUSC 3075 Meistersingers
Choice of Area Introductory Course:
MUSC 2711 Intro to Commercial Music 3
MUSC 2720 Intro to Music Education
Electives (Choose minimum of 4 credit hours)
MUSC 1211 Freshman Theory II
MUSC $1260 \quad$ Freshman Aural Skills II
MUSC $3045 \quad$ Fundamentals of Conducting
MUSC $3060 \quad$ Choral Conducting
MUSC $3110 \quad$ Brass Techniques
Woodwind Techniques
MUSC $3120 \quad$ Vocal Tech for Instrumentalists
MUSC 3130 String Techniques
MUSC $3140 \quad$ Percussion Techniques
Applied Music at or above 2000 level
Major Ensemble participation (see above)

## Post-Baccalaureate Certification in Music K-12

If the student has an academic major in music, it is accepted but must include the Music Core listed below.

Music Core:
Course/Number
MUSC 1210/1211/1250 /1260
MUSC 2211/2212
MUSC 3370/3380/4220
MUSC 3110/3111/3120
/3130 or
MUSC 3045/3050 or
3060
MUSC 4210
MUSC 4310
MUSC (7 semesters)

| Title | HR. |
| :--- | :---: |
| Freshman Theory I, II | 8 |
| Sophomore Theory III, IV | 6 |
|  <br> Literature/World Music | 8 |
| Instrumental Techniques | 4 |
| Conducting |  |
|  | 4 |
| Form \& Analysis | 3 |
| Orchestration | 2 |
|  <br> Recital <br> Pass Piano Proficiency <br> Exam | 7 |
|  | 0 |

Total Hours: 42

The student may choose to take the Professional Education Core at the undergraduate or graduate level. However a student working simultaneously on licensure and a Master's degree must take professional education courses at the graduate level.

Undergraduate Professional Education Core:
Course/No. Title Hrs.
PSYC 2420 Human Growth Develop. 3
EDCI 2010 Hist./Founds. of Educ. 3
EDCI 3110 Classroom Management 3
EDSE 3330 Educ. of Except. Children 3
MUSC 3011 Elem/Gen. Music Meth. 3
MUSC 4708 Choral Music Methods \& Materials or
4709 Instrumental Music Methods \& Materials
EDRD 4910 Reading/Study in the Secondary School 3
MUSC 2610 Music \& Technology I 2
EDCI 3870 Curriculum Development 3
Graduate Professional Education Core:
PSYC 5430 Adv. Educational Psychology 3
EDCI 5000 Foundations of Education 3
EDSE 5530 Ed./Psych. Except. Child 3
MUSC 5250 Found./Phil. of Music Ed 3
MUSC 5050 Gen. Music Meth. K-12 3
MUSC 5010 Advanced Vocal Methods or
or 5100 Instrumental Music Methods 3
EDCI 6100 Curriculum Planning \& Programming 3
EDCI 5840 Classroom Behavior Management 3
EDRD 6050 Reading in Content Area 3
EDCI 6190 Microcomputers/Ed Services 3
Total Hours: 30
PLUS:
Enhanced Student Teaching (Elementary and Secondary) 9 hours
Enhanced Student Teaching Seminar 3 hours

Suggested Four Year Program:
Bachelor of Science Degree in Music
Concentration in Instrumental/General Music Education
(Licensure for Grades K-12)

| FRESHMAN YEAR |  |
| :--- | :---: |
| FALL SEMESTER |  |
| Service to Leadership | 1 |
| Freshman English I | 3 |
| Any General Education Math | 3 |
| Applied Instrument I | 1 |
| Performance Seminar | 0 |
| Freshman Music Theory I | 3 |
| Freshman Aural Skills I | 1 |
| Major Instrumental Ensemble | 1 |
| Vocal Tech for Instrumentalists | 1 |
| Music Appreciation | 3 |
|  | 17 |
| SPRING SEMESTER | HR |
| Freshman English II | 3 |
| Conceptual Physics | 4 |
| Humanities | 3 |
| Applied Instrument II | 1 |
| Performance Seminar | 0 |
| Freshman Music Theory II | 3 |
| Freshman Aural Skills II | 1 |
| Major Instrumental Ensemble | 1 |
| Instrumental Techniques | 1 |
|  | 17 |
| SOPHOMORE YEAR |  |
| FALL SEMESTER | HR |
| Any Sophomore Literature | 3 |
| History \& Foundations of Edu | 3 |


| HIST 2010 | American History I | 3 |
| :--- | :--- | :---: |
| COMM 2200 | Public Speaking | 3 |
| MUSC 2xxx | Applied Instrument III | 1 |
| MUSC 3020 | Performance Seminar | 0 |
| MUSC 2211 | Sophomore Music Theory I | 3 |
| MUSC | Major Instrumental Ensemble | 1 |
| MUSC 31xx | Instrumental Techniques | 1 |
|  |  | 18 |
|  | SPRING SEMESTER | HR |
| PSYC 2420 | Human Growth/Development | 3 |
| HIST 2010/21 | American HIST II or TN HIST | 3 |
| Any GenEd | Natural Science | 4 |
| MUSC 2720 | Intro to Music Education | 2 |
| MUSC 2xxx | Applied Instrument IV | 1 |
| MUSC 3020 | Performance Seminar | 0 |
| MUSC 1211 | Sophomore Music Theory II | 3 |
| MUSC | Major Instrumental Ensemble | 1 |
| MUSC 31xx | Instrumental Techniques | 1 |
|  |  | 18 |


|  | JUNIOR YEAR FALL SEMESTER | HR |
| :---: | :---: | :---: |
| GEN ED | Social/Behavioral Science | 3 |
| MUSC 3011 | Elem/Secondary Music Meth. | 3 |
| MUSC 3370 | Music History I | 3 |
| MUSC 4210 | Form \& Analysis | 3 |
| MUSC 3xxx | Applied Instrument V | 1 |
| MUSC 3020 | Performance Seminar | 0 |
| MUSC | Major Instrumental Ensemble | 1 |
| MUSC 31xx | Instrumental Techniques | 1 |
| MUSC 3045 | Fundamentals of Conducting | 2 |
|  |  | 17 |
|  | SPRING SEMESTER | HR |
| GenEd | Social/Behavioral Science | 3 |
| MUSC 3xxx | Applied Instrumental VI | 1 |
| MUSC 3020 | Performance Seminar | 0 |
| MUSC | Major Instrumental Ensemble | 1 |
| MUSC 3380 | Music History II | 3 |
| MUSC 4310 | Orchestration | 2 |
| MUSC 2610 | Music \& Technology I | 2 |
| MUSC 3360 | World Music | 2 |
| MUSC 3050 | Instrumental Conducting \& Lit. | 2 |
|  |  | 16 |
|  | SENIOR YEAR <br> FALL SEMESTER | HR |
| MUSC 4710 | Music Residency I | 5 |
| EDSE 3330 | Education of Exceptnl Chldrn | 3 |
| MUSC 4709 | Instrumental Method/Materials | 3 |
| MUSC 4xxx | Applied Instrument VII | 1 |
| MUSC 3060 | Performance Seminar | 0 |
| MUSC 4510 | Senior Recital | 0 |
| MUSC | Major Instrumental Ensemble | 1 |
|  |  | 13 |
|  | SPRING SEMESTER | HR |
| EDCI 4720 | Music Residency II | 9 |
| MUSC 4705 | Education Seminar | 3 |
|  |  | 12 |

Suggested Four Year Program:
Bachelor of Science Degree in Music
Concentration in Vocal/General Music Education
(Licensure for Grades K-12)
FRESHMAN YEAR

|  | FALL SEMESTER | HR |
| :--- | :--- | :---: |
| UNIV 1000 | Service to Leadership | 1 |
| ENGL 1010 | Freshman English I | 3 |
| GEN ED | General Education Math | 3 |

MUSC 1040
MUSC 3020
MUSC 1210
MUSC 1250
MUSC
MUSC 3145
MUSC 1010

ENGL 1020
PHYS 1030
Any GenEd
MUSC 1401
MUSC 3020
MUSC 1211
MUSC 1260
MUSC
MUSC 3146

ENGL 2xxx
EDCI 2010
HIST 2010
COMM 2200
MUSC 2400
MUSC 3020
MUSC 2211
MUSC
MUSC 3147

PSYC 2420
HIST 2010/21
Any GenEd
MUSC 2720
MUSC 2401
MUSC 3020
MUSC 1211
MUSC

GEN ED
MUSC 3011
MUSC 3370
MUSC 4210
MUSC 3400
MUSC 3020
MUSC
MUSC 3045
MUSC 3148

GEN ED
MUSC 3401
MUSC 3020
MUSC
MUSC 3380
MUSC 4310
MUSC 2610
MUSC 3360
MUSC 3060
MUSC 3149

SPRING SEMESTER
Freshman English II 3
Conceptual Physics 4
Humanities
Applied Voice II
Performance Seminar
Freshman Music Theory II 3
Freshman Aural Skills II 1
Major Choral Ensemble 1
Diction for Singers II

SOPHOMORE YEAR
FALL SEMESTER
HR
Applied Voice I
Performance Seminar
Freshman Music Theory I 3
Freshman Aural Skills I 1
Major Choral Ensemble 1
Diction for Singers I 1
Music Appreciation
3
17

HR

Any GenEd Sophomore Lit. 3
History \& Foundations of Edu 3
American History I 3
Public Speaking
Applied Voice III 1
Performance Seminar 0
Sophomore Music Theory I 3
Major Choral Ensemble 1
Guitar for the Music Educator

SPRING SEMESTER
18
HR
Human Growth/Development
3
American HIST II or TN HIST 3
Natural Science 4
Intro to Music Education 2
Applied Voice IV 1
Performance Seminar 0
Sophomore Music Theory II
Major Choral Ensemble

| 1 |
| :---: |
| 17 |

$\begin{array}{ll}\text { JUNIOR YEAR } & 17 \\ \text { FALL SEMESTER } & \text { HR }\end{array}$
$\begin{array}{ll}\text { Social/Behavioral Science } & 3 \\ \text { Elem/Secondary Music Methods } & 3\end{array}$
Music History I 3
Form \& Analysis 3
Applied Voice V 1
$\begin{array}{ll}\text { Performance Seminar } & 0 \\ \text { Major Choral Ensemble } & 1\end{array}$
Fundamentals of Conducting 2
Piano Accompanying I

| 1 |
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| 17 |

SPRING SEMESTER HR
Social/Behavioral Science 3
Applied Voice VI 1
$\begin{array}{ll}\text { Performance Seminar } & 0 \\ \text { Major Choral Ensemble } & 1\end{array}$
Music History II 3
Orchestration
Music \& Technology I
World Music

- 2

Choral Conducting \& Literature
Piano Accompanying II

SENIOR YEAR
FALL SEMESTER

| MUSC 4710 | Music Residency I | 5 | or 3010 | Analysis \& Creation Pop Song |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EDSE 3330 | Education of Exceptional Children | 3 | MUSC | Major Ensemble | 1 |
| MUSC 4708 | Choral Methods \& Materials | 3 | MUSC 3370 | Music History I or | 3 |
| MUSC 4400 | Applied Voice VII | 1 | or 3385 | History of Popular Music |  |
| MUSC 3020 | Performance Seminar | 0 |  | Foreign Language I | 3 |
| MUSC 4510 | Senior Recital | 0 |  | GenEd Social/Behavior Science | 3 |
| MUSC | Major Choral Ensemble | 1 |  | GenEd History | 3 |
|  |  | 13 |  |  | 17 |
|  | SPRING SEMESTER | HR |  | SPRING SEMESTER | HR |
| EDCI 4720 | Music Residency II | 9 | MUSC 3xxx | Applied Major II | 1 |
| MUSC 4705 | Education Seminar | 3 | MUSC 3020 | Performance Seminar or | 0 |
|  |  | 12 | or 3030 | Commercial Styles Seminar |  |
| Suggested Four Year Program: |  |  | MUSC 3045, 3050 or | Conducting: Fundamentals, Instrumental, or Choral | 2 |
| Bachelor of Science Degree in Music (Concentration in Liberal Arts) |  |  | 3060 | Major Ensemble | 1 |
|  |  |  | MUSC 3380 | Music History II | 3 |
|  |  |  |  | Foreign Language II | 3 |
| FRESHMAN YEAR |  |  |  | Elective | 3 |
|  | FALL SEMESTER | HR |  | Elective | 3 |
| MUSC 1xxx | Applied Major I | 1 |  |  | 16 |
| MUSC 3020 | Performance Seminar or | 0 |  |  |  |
| or 3030 | Commercial Styles Seminar |  |  | SENIOR YEAR |  |
| MUSC 1210 | Freshman Theory I | 3 |  | FALL SEMESTER | HR |
| MUSC 1250 | Freshman Aural Skills I | 1 | MUSC 4xxx | Applied Major IV | 1 |
| MUSC | Major Ensemble | 1 | MUSC 3020 | Performance Seminar or | 0 |
| UNIV 1000 | Service of Leadership | 1 | or 3030 | Commercial Styles Seminar |  |
| ENGL 1010 | Freshman English I | 3 | MUSC 4510 | Senior Recital | 0 |
| Any GenEd | General Education Math | 3 | MUSC | Major Ensemble | 1 |
|  |  | 13 | MUSC 4220 | World Music (2 cr.) or | 2-3 |
|  | SPRING SEMESTER | HR | or 4240 | American Music (3 cr.) |  |
| MUSC 1xxx | Applied Major II | 1 |  | Elective | 1-0 |
| MUSC 3020 | Performance Seminar or | 0 | MUSC 4450 | Entrepreneurship in the Arts | 3 |
| or 3030 | Commercial Styles Seminar |  |  | Elective | 3 |
| MUSC 1211 | Freshman Theory II | 3 |  | Elective | 3 |
| MUSC 1260 | Freshman Aural Skills II | 1 |  |  | 14 |
| MUSC | Major Ensemble | 1 |  | SPRING SEMESTER | HR |
| ENGL 1020 | Freshman English II | 3 | MUSC | Major Ensemble | 1 |
| MUSC 1010 | Music Appreciation | 3 |  | Elective | 2 |
| COMM 2200 | Public Speaking | 3 |  | Elective | 3 |
|  |  | 15 |  | Elective | 3 |
|  |  |  |  | Elective | 3 |
|  | SOPHOMORE YEAR |  |  | Elective | 3 |
|  | FALL SEMESTER | HR |  |  | 15 |
| MUSC 2xxx | Applied Major III | 1 |  |  |  |
| MUSC 3020 | Performance Seminar or | 0 | Suggested Four Year Program: |  |  |
| or 3030 | Commercial Styles Seminar |  |  |  | Bachelor of Science Degree in Music (Concentration in Commercial Music: Performance) |  |  |
| MUSC 2211MUSC | Music Theory III | 3 |  |  |  |  |  |
|  | Major Ensemble | 1 |  |  |  |  |  |
| GenEd | Sophomore Literature | 3 |  | FRESHMAN YEAR |  |
| GenEd | Social/Behavioral Science | 3 |  | FALL SEMESTER | HR |
| PHYS 1030 | Conceptual Physics | 4 | MUSC 1xxx | Major Applied I | 1 |
|  |  | 15 | MUSC 1210 | Freshman Theory I | 3 |
|  | SPRING SEMESTER | HR | MUSC 1250 | Freshman Aural Skills I | 1 |
| MUSC 2xxx | Applied Major IV | 1 | MUSC 3030 | Comm. Styles Seminar | 0 |
| MUSC 3020 | Performance Seminar or | 0 | MUSC 1510 | Comm. Music Ensemble | 1 |
| or 3030 | Commercial Styles Seminar |  | MUSC 1010 | Music Appreciation | 3 |
| MUSC 2212 | Music Theory IV | 3 | ENGL 1010 | Freshman English I | 3 |
| MUSC | Major Ensemble | 1 | MATH 1110 | College Algebra | 3 |
| GenEd | History | 3 | UNIV 1000 | Service of Leadership | 1 |
| GenEd | Humanities | 3 |  |  | 16 |
| GenEd | Natural Sciences | 4 |  | SPRING SEMESTER | HR |
|  |  | 15 | MUSC 1xxx | Major Applied II | 1 |
|  | JUNIOR YEAR |  | MUSC 1211 | Freshman Theory II | 3 |
|  | FALL SEMESTER | HR | MUSC 1260 | Freshman Aural Skills II | 1 |
| MUSC 3xxx | Applied Major V | 1 | MUSC 3030 | Comm. Styles Seminar | 0 |
| MUSC 3020 | Performance Seminar or | 0 | MUSC 1510 | Comm. Music Ensemble | 1 |
| or 3030 | Commercial Styles Seminar |  | GenEd | Humanities | 3 |
| MUSC 4210 | Form \& Analysis or | 3 | ENGL 1020 | Freshman English II | 3 |
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| 3 | MUSC 4010 | Internship | 3 |
| :---: | :---: | :---: | :---: |
| 15 | MUSC 4515 | Senior Project | 1 |
|  | MUSC 4510 | Senior Recital | 0 |
|  |  | Guided Electives | 3 |
| HR |  |  | 13 |
| 1 |  |  |  |
| 3 | Suggested Four Year Program: |  |  |
| 0 | Bachelor of Science Degree in Music (Concentration in Commercial Music: Technology) |  |  |
| 1 |  |  |  |
| 3 |  |  |  |
| 3 | FRESHMAN YEAR |  |  |
| 4 |  | FALL SEMESTER | HR |
| 3 | MUSC 1xxx | Major Applied I | 1 |
| 18 | MUSC 1210 | Freshman Theory I | 3 |
| HR | MUSC 1250 | Freshman Aural Skills I | 1 |
| HR 1 | MUSC 3030 | Comm. Styles Seminar | 0 |
| 3 | MUSC 1510 | Comm. Music Ensemble | 1 |
| 0 | MUSC 1010 | Music Appreciation | 3 |
| 1 | ENGL 1010 | Freshman English I | 3 |
| 3 | MATH 1110 <br> UNIV 1000 | College Algebra | 3 |
| 3 |  | Service of Leadership | 1 |
| 4 |  |  | 16 |
| 15 | MUSC 1xxx | SPRING SEMESTER | HR |
|  |  | Major Applied II | 1 |
| HR | MUSC 1211 | Freshman Theory II | 3 |
| 1 | MUSC 1260 | Freshman Aural Skills II | 1 |
| 0 | MUSC 3030 | Comm. Styles Seminar | 0 |
| 1 | MUSC 1510 | Comm. Music Ensemble | 1 |
| 1 | GenEd | Humanities | 3 |
| 1 | $\begin{aligned} & \text { ENGL } 1020 \\ & \text { ECON } 2010 \end{aligned}$ | Freshman English II | 3 |
| 2 |  | Principles of Economics I | 3 |
| 3 ( 15 |  |  |  |
| 3 SOPHOMORE YEAR |  |  |  |
| 3 | SOPHOMORE YEAR |  |  |
| 2 | MUSC 2xxx | Major Applied III | 1 |
| 17 | MUSC 2211 | Sophomore Theory I | 3 |
| HR | MUSC 3030 | Comm. Styles Seminar | 0 |
| 1 | MUSC 1510 | Comm. Music Ensemble | 1 |
| 0 | GenEd | History | 3 |
| 1 | GenEd | Social/Behavioral Science | 3 |
| 1 | PHYS 1030 COMM 2200 | Conceptual Physics | 4 |
| 1 |  | Public Speaking | 3 |
|  | 23 |  |  |  |
|  |  |  |  |  |
| 3 | MUSC 2xxx | Major Applied IV | 1 |
| 1 | MUSC 2212 | Sophomore Theory II | 3 |
| 1 | MUSC 3030 | Comm. Styles Seminar | 0 |
| 14 | MUSC 3510 | Comm. Music Ensemble | 1 |
|  | GenEd | History | 3 |
|  | GenEd | Humanities | 3 |
| HR | GenEd | Natural Sciences | 4 |
| 1 |  |  | 15 |
| 0 | JUNIOR YEAR |  |  |
| 1 | MUSC 3xxx | FALL SEMESTER | HR |
| 1 |  | Major Applied V | 1 |
| 3 | MUSC 3030 | Comm. Styles Seminar | 0 |
| 1 | MUSC 3510 | Comm. Music Ensemble | 1 |
| 3 | MUSC 2610 | Music \& Technology I | 2 |
| 1 | MUSC 3385MUSC 2710 | History of Popular Music | 3 |
| $\frac{1}{12}$ |  | Intro to Commercial Music | 3 |
|  | MUSC 2710 <br> MUSC 3610 | Basic Studio | 3 |
| HR | MUSC 3045 | Fundamentals of Conducting | 2 |
| $1 \times 15$ |  |  |  |
| 0 |  | SPRING SEMESTER | HR |
| 1 | MUSC 3xxx | Major Applied VI | 1 |
| 1 | MUSC 3030 | Comm. Styles Seminar | 0 |
| 3 | MUSC 3510 | Comm. Music Ensemble | 1 |

MUSC 3620
MUSC 3380
MUSC 3710
MUSC 4610
MUSC 4310

Music \& Technology II 3
Music History II 3
Music Business \& Law
Advanced Studio
Orchestration

| 3 |
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| 3 |
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| 16 |

SENIOR YEAR
FALL SEMESTER HR
MUSC 4xxx
MUSC 3030
MUSC 4510
MUSC 3510
MUSC 4450
MUSC 4615
MUSC 4410
Major Applied VII
Comm. Styles Seminar
Senior Recital
Comm. Music Ensemble
Entrepreneurship in Arts
Audio for Video
Arranging
Techniques I
Techniques II

SPRING SEMESTER
MUSC 4515
MUSC 4010
MUSC 3010
MUSC 3615
Senior Project
HR

## Internship

Analysis \& Create Pop Song
Live Sound Reinforcement

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| 12 |

Techniques III
Techniques IV

Suggested Four Year Program:
Bachelor of Science Degree in Music
(Concentration in Commercial Music: Business)
FRESHMAN YEAR

MUSC 1xxx
MUSC 1210
MUSC 1250
MUSC 3030
MUSC 1510
MUSC 1010
ENGL 1010
MATH 1110
UNIV 1000
FALL SEMESTER
Major Applied I
Freshman Theory I
Freshman Aural Skills I
Comm. Styles Seminar
Comm. Music Ensemble
Music Appreciation
Freshman English I
College Algebra
Service of Leadership
SPRING SEMESTER
MUSC 1xxx
MUSC 1211
MUSC 1260
MUSC 3030
MUSC 1510
GenEd
ENGL 1020
ECON 2010

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| 3 |
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| 15 |

SOPHOMORE YEAR
FALL SEMESTER HR
MUSC 2xxx
MUSC 2211
MUSC 3030
MUSC 1510
GenEd
PHYS 1030
ECON 2020
COMM 2200

Major Applied III
Sophomore Theory I
Comm. Styles Seminar
Comm. Music Ensemble
History
Conceptual Physics
Principles of Economics
Public Speaking

1
3
0
1
3
4

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| 18 |

SPRING SEMESTER
Major Applied IV

## SENIOR YEAR

MUSC 4xxx
MUSC 3030
MUSC 4510
MUSC 3510
MUSC 4450
MUSC 4410
MUSC 3010
MUSC 4515
FALL SEMESTER
HR
Major Applied VII
Comm. Styles Seminar 0
Senior Recital
Comm. Music Ensemble
Entrepreneurship in Arts
Arranging
Mgmt. \& Organization Beh
Senior Project
0
1

SPR SEMESTER
SPRING SEMESTER
HR

MUSC 2212 Sophomore Theory II 3
MUSC 3030 Comm. Styles Seminar 0
MUSC 3510 Comm. Music Ensemble 1
GenEd
GenEd
GenEd
History
Natural Sciences
Sophomore Literature


## JUNIOR YEAR

| FALL SEMESTER | HR |
| :--- | :---: |
| Major Applied V | 1 |
| Comm. Styles Seminar | 0 |
| Comm. Music Ensemble | 1 |
| History of Popular Music | 3 |
| Intro to Commercial Music | 3 |
| Music \& Technology I | 2 |
| Principles of Accounting | 3 |
| Basic Studio | 3 |
| SPRING SEMESTER | 16 |
| Major Applied VI | HR |
| Comm. Styles Seminar | 1 |
| Comm. Music Ensemble | 0 |
| Music History II | 1 |
| Music Business \& Law | 3 |
| Microcomputer | 3 |
| Basic Marketing | 3 |
| Orchestration | 3 |
|  | 2 |
|  | 16 |

3

MUSC $3 x x x$
MUSC 3030
MUSC 3510
MUSC 3385
MUSC 2710
MUSC 2610
ACCT 2010
MUSC 3610

MUSC 3xxx
Major Applied VI
R
MUSC 3030
MUSC 3510
MUSC 3380
MUSC 3710
BISI 2150
MKTG 3010
MUSC 4310

MUSC 4010
MUSC 3010
COMM 4460
Internship
Analysis \& Create Pop Song
Creative Advert Strategies
Guided Business Elective

Course Descriptions
Applied Music Courses (MUSC)
Enrollment in all applied music courses is by permission of instructor only. The laboratory fees are for each semester. The student has individual sessions with the instructor each week.

[^2]MUSC 1105, 1106, 2105, 2106, Proficiency Piano I-IV (1). A piano laboratory class for music majors and minors who are striving to meet the required competency standards. The emphasis is on scales, arpeggios, cadences, harmonizing, reading open 4 part score, sightreading, and transposition. Two one- hour periods. Prerequisite: follow course sequence or placement by audition.

MUSC 1115 Class Piano I for Non-majors (1). Course intended for non-majors/minors. Topics include notes, rhythms, fingering, proper playing techniques, scales, and selected songs. One hour credit.
MUSC 1116 Class Piano II for Non-majors (1). A continuation of MUSC 1115, this course is intended for non-music majors/minors. Topics include more in-depth study of notes, rhythms, fingerings, proper playing techniques, scales, chords, and selected songs. One hour credit.

MUSC 1200, 1201, 2200, 2201, 3200, 3201, 4200, 4201, Applied Organ I-VIII (1). Pedal studies, major and minor scales, legato studies, little preludes and fugues of Bach, trios by Stainer, Rheinberger, and others; selected books of Guilmant, Mendelssohn, and other reputable composers. Prerequisites: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1300, 1301, 2300, 2301, 3300, 3301, 4300, 4301 Applied Violin I-VIII (1). Instruction with standard, intermediate, advanced violin materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1305, 1306, 2305, 2306, 3305, 3306, 4305, 4306 Applied Viola I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1307, 1308, 2307, 2308, 3307, 3308, 4307, 4308 Applied Cello I-VIII (1). Instruction with standard, intermediate, advanced cello materials. Prerequisite: follow course sequence. Laboratory fee \$100.00.

MUSC 1315, 1316, 2315, 2316, 3315, 3316, 4315, 4316 Applied String Bass I-VIII (1). Instruction with standard, intermediate, and advanced string bass materials. Prerequisite: follow course sequence. Laboratory fee \$100.00.

MUSC 1317, 1318, 2317, 2318, 3317, 3318, 4317, 4318 Applied Harp (1). Instruction with standard, intermediate and advanced pedal harp materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1400, 1401, 2400, 2401, 3400, 3401, 4400, 4401 Applied Voice I-VIII (1). The study of breath control and voice placement in tone production study of voice drills in voice placement, intonation, breathing, phrasing, and diction vocal techniques, and appropriate repertoire. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1500, 1501, 2500, 2501, 3500, 3501, 4500, 4501 Applied Trumpet I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1505, 1506, 2505, 2506, 3505, 3506, 4505, 4506 Applied French Horn I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1590, 1591, 2590, 2591, 3590, 3591, 4590, 4591 Applied Guitar I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1600, 1601, 2600, 2601, 3600, 3601, 4600, 4601 Applied Trombone I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1605, 1606, 2605, 2606, 3605, 3606, 4605, 4606 Applied Euphonium I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1607, 1608, 2607, 2608, 3607, 3608, 4607, 4608 Applied Tuba I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 1700, 1701, 2700, 2701, 3700, 3701, 4700, 4701 Applied Clarinet I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee \$100.00.

MUSC 1705, 1706, 2705, 2706, 3705, 3706, 4705, 4706 Applied Flute I-VIII (1). Instruction with standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$

MUSC 1800, 1801, 2800, 2801, 3800, 3801, 4800, 4801 Applied Oboe I-VIII (1). The study of standard, intermediate, advanced materials. Prerequisite: follow course sequence. Laboratory fee \$100.00.

MUSC 1805, 1806, 2805, 2806, 3805, 3806, 4805, 4806 Applied Bassoon I-VIII (1). The study of standard, intermediate, and advanced materials. Prerequisite: follow course sequence. Laboratory fee \$100.00.

MUSC 1900, 1901, 2900, 2901, 3900, 3901, 4900, 4901 Applied Saxophone I-VIII (1). The study of standard, intermediate, and advance materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

MUSC 2020 Woodwind Class for Non-Majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admission by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated for up to four hours of credit. Non-music majors only.
MUSC 2025 Brass Class for Non-Majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admissions by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Non-music majors only. .

MUSC 2026 Percussion Class for Non-majors (1). Course intended for University Marching Band students needing increased proficiency on their instrument. Admissions by permission of the Director of Bands. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit. Non-music majors only.

MUSC 3020 Performance Seminar (0). Required of Music Education and Liberal Arts majors Students perform material studied in their (corequisite) major applied classes. No prerequisites.

MUSC 3045 Fundamentals of Conducting (2). Emphasis on basic techniques of conducting choral and instrumental ensembles with focus on meter patterns, conventional gestures, terminology, and rudiments of score study. Prerequisite: MUSC 2212.

MUSC 3050 Instrumental Conducting \& Literature (2). A study of the techniques of conducting a band or an orchestra, with particular emphasis on use of the baton, score reading, program planning, and rehearsal procedures. Scores suitable for use in secondary school bands and orchestras are examined and evaluated. Prerequisite: MUSC 3045 Fundamentals of Conducting. Required of Music Education-Instrumental/General majors.

MUSC 3060 Choral Conducting \& Literature (2). A study of the techniques of conducting a choir, with particular emphasis on score reading, program planning, and rehearsal procedures. Scores suitable for use in secondary school choirs are examined and evaluated. Prerequisite: MUSC 3045 Fundamentals of Conducting. Required of Music Education-Instrumental/General majors.

MUSC 3110 Brass Techniques (1). Fundamentals of care, construction, minor repair, and performance. Not for brass majors. Prerequisite: MUSC 1210.

MUSC 3111 Woodwind Techniques (1). Fundamentals of tone production, techniques, care, construction, and minor repair. Not for woodwind majors. Prerequisite: permission of instructor. Two onehour periods.

MUSC 3120 Vocal Techniques for the Instrumentalist (1). The study of techniques of vocal tone production, breathing, articulation, enunciation, and pronunciation as applied to the training of choral groups. Not for vocal majors. Course is required of Music EducationInstrumental/General majors.

MUSC 3130 String Techniques (1). The study of the fundamentals of bowing, fingering, construction, and care of string instruments, including fretted instruments. Not intended for string majors.

MUSC 3140 Percussion Techniques (1). Fundamentals of care and minor repair; study of techniques of performance on most percussion instruments with emphasis on the snare drum.

MUSC 3145 Introduction to Vocal Diction (1). Augmentation of applied voice study. Phonetics and diction for singers of English, Italian, German, and French vocal literature. Prerequisite: MUSC 1400, Applied Voice I. 1 hour.

MUSC 3146 Diction for Singers II. (1) Augmentation of applied voice study. Phonetics and diction for singers of French and German vocal literature. Prerequisite: MUSC 3145.

MUSC 3147 Class Guitar for the Music Educator (1). An overview of fundamental guitar skills focusing on the classroom needs of music educators including the study of chords, chord progressions, simple accompaniment patterns, classroom repertoire of folk and popular songs, the development of playing techniques in order to be able to instruct K-12 beginners in learning introductory playing skills. Prerequisite: MUSC 1211.

MUSC 3148 Piano Accompanying I (1). Course designed to prepare music education students with piano skills enabling their ability to accompany in the K-12 classroom, particularly pertaining to elementary general music classes, and elementary, middle and high school choral settings. Prerequisite: MUSC 2106 or Piano Proficiency Exam.

MUSC 3149 Piano Accompanying II (1). Continuation of Piano Accompanying I with an emphasis on advanced skills designed to prepare students to accompany K-12 elementary students, middle school or high school chorus students in classroom and performance situations. Prerequisite: permission of instructor and admission to Teacher Education Program.

MUSC 3160 Opera Workshop (3). An introduction to operatic performance to include acting, movement, and the staging of various operatic scenes. Prerequisite: permission of instructor.

MUSC 4510 Senior Recital. Student passed only upon successful completion of the public senior recital. Prerequisite: completion of applied courses and permission of major applied instructor and Department Chair. Required of all Music majors.

MUSC 4905, 4906 Applied Music IX, X (1). Continuation of advanced instruction with standard materials. Prerequisite: Successful completion of Applied Instrument or Voice VIII. Laboratory fee $\$ 100$.

## Primary Ensembles

MUSC 1510, 3510 Commercial Music Ensemble (1), MUSC 1511 Commercial Music Ensemble-zero credit (0). Preference will be given to Commercial Music majors. The group performs "popular" ("top 40") music from the past to the present, and provides a laboratory for members to develop performance skills, stage presence, musicianship, and an awareness of various musical styles. Operation of some lighting, audio, and management functions may also be available for members. The ensemble performs publicly as opportunities are presented. May be repeated for five hours of credit, each. Prerequisite: audition and permission of instructor.
MUSC 2010 University Marching Band (1), MUSC 2011 University Marching Band-zero credit (0). Admission by audition and permission of the Director of Bands. The study and performance of marching routines and performance styles designed for live, film, and televised performances. Meets daily 6:00-8:00pm. Extra rehearsals as called. All instrumental music education and music-liberal arts majors must have 3-4 semesters of MUSC 2010. May be repeated for up to 7 hours of credit.

MUSC 2095, 3095 Wind Ensemble (1), MUSC 2091 Wind Ensemblezero credit (0). Admission by permission of the Director of Bands. Ensemble consists of top wind, percussion, and string instrumentalists within the Department of Music who exhibit outstanding musicianship and an interest in performing the finest of symphonic literature. Courses may be repeated up to 4 hours of credit, each, and may be used to meet large ensemble requirements.

MUSC 2096, 3096 Concert Band (1), MUSC 2092 Concert Band-zero credit (0). Open by audition to all University students proficient with a band instrument, and with permission of the Director of Bands. Ensemble performs standard and contemporary band literature. This course may be used to meet large ensemble requirements. Course in one hour credit, and may be repeated up to four hours of credit, each.

MUSC 2098, 3098 Orchestra (1), MUSC 2094 Orchestra-zero credit (0). Open to all University students proficient with an orchestra instrument, and permission of the Director. Ensemble performs standard and contemporary orchestra literature. This course may be used for large ensemble requirements. May be repeated up to four hours of credit, each.

MUSC 3070 University Choir (1), MUSC 3071 University Choir-zero credit (0). The study and performance of a variety of the finest choral literature, including non-western music. Prerequisite: audition and permission of the Director of the University Choir. May be repeated for up to 8 credit hours.

MUSC 3075 Meistersingers (1), MUSC 3076 Meistersingers-zero credit (0). Course intended for vocal majors and students with proficiency in voice. Students are exposed to secular and sacred choral chamber literature from various periods and cultures. Admission by permission of the instructor. Emphasis is placed on public performance of material. May be repeated up to four hours of credit.

## Secondary Ensembles

MUSC 2050 Gospel Chorus (1 hr.), MUSC 2051 Gospel Chorus-zero credit (0). A standards-based vocal music opportunity to experience and participate in music and settings derived from the American experience. Students meet regularly to enhance skills that are specifically germane to vocal gospel music production. A variety of repertoire and styles within the genre are selected each semester, addressing objectives of the course. Performance experiences are incorporated to assist students in a comprehensive and interactive aesthetic experience. May be taken up to eight times for credit. Admission by audition.
MUSC 2097, 3097 Pep Band (1), MUSC 2093 Pep Band-zero credit (0). Membership open to all University Marching Band students by permission of the Director of Bands. This ensemble performs at university basketball games and special events. Music majors and band scholarships students must maintain concurrent membership in University Marching and Concert Bands. May be repeated up to 4 hours of credit.

MUSC 3078 Jazz Vocal Ensemble (1), MUSC 3079 Jazz Vocal Ensemble-zero credit (0). Course intended for vocal majors and student with proficiency in voice. Students are exposed to vocal literature of various jazz styles. Admission by permission of the instructor. May be repeated up to four hours of credit.

MUSC 3090 Show Choir (1), MUSC 3091 Show Choir-zero credit (0). The show choir, of the university performs literature from Broadway shows and popular music styles with fully staged choreography. The official name is TSU Showstoppers. Prerequisite: audition, and permission of instructor.
MUSC 3810 Flute Ensemble (1), MUSC 3811 Flute Ensemble-zero credit (0). Course intended for flute majors, and students with proficiency on flute. Students are exposed to flute chamber literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.
MUSC 3815 Clarinet Choir (1), MUSC 3820 Clarinet Choir-zero credit (0). Course intended for clarinet majors, and students with proficiency on clarinet. Students are exposed to clarinet literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3816 Saxophone Quartet (1), MUSC 3821 Saxophone Quartetzero credit (0). Course intended for saxophone majors, and students with proficiency on saxophone. Students are exposed to saxophone chamber literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3818 Double-Reed Ensemble (1), MUSC 3822 Double-Reed Ensemble-zero credit (0). Course intended for double reed majors and students with proficiency on double reeds. Students are exposed to appropriate literature from all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3819 Woodwind Quintet (1), MUSC 3823 Woodwind Quintetzero credit ( 0 ). Course intended for double reed, single reed, and French horn majors, and students with proficiency on listed instruments. Students are exposed to woodwind chamber literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3830 Trumpet Choir (1), MUSC 3831 Trumpet Choir-zero credit (0). Course intended for trumpet majors, and students with proficiency on trumpet. Students are exposed to trumpet chamber literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. Rehearsals are to be arranged. May be repeated up to four hours of credit.

MUSC 3835 Horn Ensemble (1), MUSC 3840 Horn Ensemble-zero credit (0). Course intended for French horn majors, ands students with proficiency on French horn. Students are exposed to trombone chamber literature from all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.
MUSC 3836 Trombone Choir (1), MUSC 3841 Trombone Choir-zero credit ( 0 ). Course intended for trombone majors, and students with proficiency on trombone. Students are exposed to trombone chamber literature form all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.
MUSC 3837 Tuba Ensemble (1), MUSC 3842 Tuba Ensemble-zero credit (0). Course intended for tuba majors and students with proficiency on tuba. Students are exposed to tuba literature from all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3839 Brass Quintet (1), MUSC 3843 Brass Quintet-zero credit (0). Course intended for brass majors, and students with proficiency on brass. Students are exposed to brass literature from all periods and cultures. Admission by permission of the instructor. This course may not be used for large ensemble requirements. May be repeated up to four hours of credit.

MUSC 3850 Percussion Ensemble (1), MUSC 3851 Percussion Ensemble-zero credit ( 0 ). Course intended for percussion majors, and students with proficiency on percussion. Students are exposed to percussion literature from all periods and cultures. This course may not be used for large ensemble requirements. May be repeated for up to 4 hours of credit.
MUSC 3870 Jazz Ensemble (1), MUSC 3871 Jazz Ensemble-zero credit ( 0 ). Membership open to all University students by audition. Ensemble performs traditional and contemporary jazz. This course may not be used for large ensemble requirements. May be repeated for up to 4 hours of credit.
MUSC 3875 Jazz Combo (1), MUSC 3876 Jazz Combo-zero credit (0). Membership open to all University students by audition. Ensemble performs traditional and contemporary jazz composed specifically for small jazz group. The course may not be used for large ensemble requirements. May be repeated up to four hours of credit.
MUSC 3890 String Ensemble (1), MUSC 3891 String Ensemble-zero credit ( 0 ). Open to students with proficiency on a string instrument and permission of instructor. Course included the study and performance of literature for chamber strings. This course may be used for large ensemble requirements. May be repeated up to eight hours of credit.
MUSC 3898 Guitar Ensemble (1), MUSC 3899 Guitar Ensemble-zero credit ( 0 ). Course intended for guitar majors and student with proficiency on guitar. Students are exposed to guitar chamber literature from various periods and cultures. Admission by permission of the instructor. Rehearsals are to be arranged. May be repeated up to four hours of credit.

## Music Education

MUSC 2720 Introduction to Music Education (2). An orientation to the field of K-12 music education that introduces historical, philosophical and practical foundations for the teaching of music. Includes hands-on and field observation experiences with methods and pedagogical approaches to help prepare the student confirm a decision to enter the field.

MUSC 3011 Elementary and Secondary General Music Methods (3). A study of methods and materials for the general music curriculum in elementary and secondary schools. Helps to prepare future music educators to build effective experiences for K-12 students through
singing, playing, movement, composition and listening. Also focuses on special instruction techniques, including Orff, Kodaly, Dalcroze and Gordon methods. Prerequisite: MUSC 2720 and official admission to the TSU Teacher Education Program, or consent of the instructor.
MUSC 4708 Choral Methods \& Materials (3). A study of principles and problems of teaching voice, managing and directing choral organizations, and analyzing and evaluating choral materials. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Required of all students seeking certification in Music who wish an emphasis in teaching voice. Prerequisite: permission of instructor and official admission to the Teacher Education Program.

MUSC 4709 Instrumental Methods \& Materials (3). A study of methods, philosophies, materials, and objectives for teaching instrumental music from grade four through grade twelve. Clinical and field-based experiences which call for active participation by students are part of the course requirements. Prerequisite: permission of instructor and official admission to the Teacher Education Program.
MUSC 4710 Music Residency I (5). Clinical practicum for music education majors, with students appropriately placed in elementary and/or secondary schools in conjunction with enrollment in elementary and/or secondary music methods courses. Prerequisite: permission of instructor and admission to TSU Teacher Education Program.

MUSC 4720 Music Residency II: Enhanced Student Teaching (9). A semester-long experience of supervised practice teaching, appropriately divided between elementary and secondary schools. Prerequisite: successful completion of all certification courses and passing scores on required Praxis II licensure exams. To be taken concurrently with EDCI 4705.

## Theory and Composition

MUSC 1011 Materials of Music (3). A course designed to prepare students, through instruction and practical application of knowledge, to read, write, and hear music. A student may be exempted from this course and move directly to MUSC 1210/1250 through placement scoring on the entrance examination in theory. This fundamental course does meet requirements toward music degrees.

MUSC 1012 Materials of Music Lab (1). Corequisite laboratory course designed to accompany MUSC 1011-Materials of Music. A student may be exempted from this course and move directly to MUSC $1210 / 1250$ through placement scoring on the entrance examination in theory. This fundamental course does meet requirements toward music degrees.
MUSC 1250, 1260 Freshman Aural Skills I, II (1, 1). Practical training for the ear. Emphasis is on gaining the ability to write down rhythms, melodies, and harmonic progressions. To be taken concurrently with MUSC 1210, 1211. Prerequisite: passing score on entrance examination in theory, follow course sequence.
MUSC 2210, 2212 Sophomore Theory I, II $(3,3)$. Aural and written harmony; keyboard harmony; figured bass; counterpoint; sight singing; ear training; analysis. Prerequisite: MUSC 1211, follow course sequence.
MUSC 4010 Practicum in Arranging (2). Individual projects supervised by a practicing professional arranger. Prerequisites: permission of instructor and junior standing in Music.
MUSC 4210, Form and Analysis I, (3). A study of compositions in the smaller and larger forms. Prerequisite: MUS 2212.

MUSC 4211 20TH/21ST Century Music (2). The study and analysis of 20th and 21st Century art music, its major trends, composers, and compositional devices. Begins with traditional tonality, continues with Neo-Classicism, atonal and serial works, electronic and avant garde styles, and post-minimalism. Also examines the importance of jazz, and accomplishments of African-Americans, and women composers. Keeps abreast of current developments in 21st Century music. Music forms to be studied include symphony, string quartet, opera, performance art, and film scores. Prerequisite: MUSC 2212.
MUSC 4310 Orchestration (2). A systematic study and application of the techniques for using the capabilities of orchestral and band instruments in music composition. Prerequisite: MUSC 2212

## Commercial Music

MUSC 1640 Country Fiddle (3). Emphasis on folk (including Bluegrass) violin performance. Prerequisite: permission of instructor.
MUSC 2610 Music and Technology I, (2) Introduction to computer music workstation environments. Fundamentals of MIDI sequencing, signal routing, synthesis, and notation. Required of all Music-Commercial Music and Music-Music Education majors. Prerequisite: MUSC 1101 or 1106.

MUSC 2710 Introduction to Commercial Music (3). A general introduction to careers in the commercial music industry. Prerequisite: ENGL 1020.

MUSC 3010 Analysis and Creation of Popular Song (3). Study of form, rhythm, melody, harmony and lyrics in popular music, as well as development and application of skills and techniques needed to craft original compositions. Prerequisites: MUSC 1211 and permission of instructor.

MUSC 3030 Commercial Styles Seminar (0) Required of all Commercia Music majors. Students perform material studied in their (co-requisite) major applied classes. No prerequisites.

MUSC 3385 History of Popular Music (3). An examination of American popular music from 1840 to present, which includes select performers, business persons, and technology, as well as significant political and social events that also impacted the development of popular music. Course includes listening and viewing examples. Required of all Music-Commercial Music majors. Prerequisite: ENGL 1020.

MUSC 3515 Junior Recital (0). Student passed only upon successful completion of the public junior recital. Prerequisite: completion of applied courses and permission of major applied instructor and department Head. Required of all Commercial Music-Performance majors.

MUSC 3610 Basic Studio (3). Practical experience in the recording studio and the study of basics, including rudimentary physics of sound, function of basic equipment, principles of microphone placement, and mixing down. Prerequisite: MUSC 2610. Same as COMM 3610.

MUSC 3615 Live Sound Reinforcement (3). Examination and application of current technologies and techniques involved in modern sound reinforcement. Topics include types of venues, and audio systems. Field work required. Pre-requisite: MUSC 3610 Basic Studio

MUSC 3620 Music and Technology II (3). Continuation of MUSC 2610 Music and Technology I, including notation, sequencing, programming, critical listening, and editing. Lab time required. Prerequisite: MUSC 2610 Music and Technology I.

MUSC 3710 Music Business and Law (3). Study of music licensing, intellectual property rights, infringement, contract construction and interpretation, royalty generation and distribution, and music publishing. Required of all Music-Commercial Music majors. Prerequisite: MUSC 2710.

MUSC 4010 Internship (3). Onsite, hands-on experience in student's area of specialization. To participate in an internship, student must have completed at least ten hours of Commercial Music courses and/or obtain permission of the Coordinator of Commercial Music, or Head of the Music Department. Student must be able to commit at least 15-20 hours per week for the internship. May be repeated for up to 12 hours of credit. Required of all Commercial Music majors.

MUSC 4410 Arranging (3). Analysis of contemporary arranging styles, as well as production of musical arrangements for various ensemble configurations. Prerequisite: MUSC 4310.

MUSC 4450 Entrepreneurship in the Arts (3).An examination of how arts professions and arts economies operate and evolve, as well as how they interact within the larger economy. Students explore opportunities in smaller economic settings. Major project includes designing and executing an entrepreneurial project. Required of all Commercial Music majors. Prerequisite: MUSC 3710 Music Bus and Law. Same as ART 4450 and COMM 4450.

MUSC 4515 Senior Project (1). The capstone project that is the culmination of a student's interests and studies in Commercial Music. The project is determined with input from the student, but finalized and coordinated with the Coordinator of Commercial Music and the Department Chair. Prerequisite: permission of the Coordinator of Commercial Music and the Department Chair.

MUSC 4615 Audio for Video (3). Examines the theories, technology, practices and art used in the creation of custom music and sound effects and incorporation into modern film and video media in a postproduction setting. Course is taught in a lecture/lab format. Required of Music-Commercial Music Technology majors. Prerequisite: MUSC 4610. Same as COMM 4615.

## Music History, Literature, and Appreciation

MUSC 1010 Music Appreciation (3). Emphasis upon development of listening skill and on a broad repertoire of literature, including both Western and Nonwestern music. History is in included to help provide deeper meaning to the development of the music being studied. Course applies toward satisfaction of University general education humanities requirement.

MUSC 1020 Honors Music Appreciation (3). Honors version of MUSC 1020. An intensive course, with emphasis on expanding the student's exposure to musical literature representative of western and nonwestern cultures. Course applies toward satisfaction of University humanities requirement. Limited to Music majors and students in the University Honors Program.

MUSC 2350 Introduction to Afro-American Music (3). History of blues, gospel music, jazz, and African music, with emphasis on black artists and their contributions. Prerequisite: permission of instructor.

MUSC 3150 Folk Music (3). Folk music with emphasis upon that of the Southeastern United States. Prerequisite: MUSC 1010.

MUSC 3370, 3380 Music History I, II $(3,3)$. General study of the history of music. The course embodies an analytic approach to music of various periods and cultures. Prerequisite: MUSC 2211.

MUSC 4220 World Music (3). A study of world music with emphasis on the music of Africa, India, China, Indonesia and South America. Attention is given to the diversity music as influenced by geographical conditions, social and economic systems, values, beliefs, and ways of life. Prerequisite: MUSC 2211.

MUSC 4240, 4250 American Music I, II (3, 3). MUS 4240 treats music from colonial times through Charles Ives; MUSC 4250 covers music from 1930 to the present. Prerequisite: permission of instructor.

MUSC 4520, 4521, 4522 Special Topics I, II, III (1-3, 2, 3). Independent studies courses intended to serve students who would otherwise be impeded in normal progress toward earning their degree or who request additional in-depth directed research or study in a specific topic. May be taken for a maximum of 9 hours of credit per course. Prerequisite: permission of Department Chair.

## College of Public Service and Urban Affairs

Michael Harris, Ph.D., Dean<br>Suite E-400 Avon Williams Campus<br>www.tnstate.edu/cpsua<br>615-963-7201<br>\section*{General Statement}

The College of Public Service and Urban Affairs exists to educate, socialize and serve students and employers of nonprofit, health and urban organizations by: providing educational programs that build skills in knowledge of sociology, social work, urban affairs, public administration and leadership; conducting scholarly and applied research activities supportive of these educational purposes; and consulting and applying research and knowledge of social programs. "WE build LEADERS and SCHOLARS who SERVE". We offer students the opportunity to learn a new approach to becoming committed, community-oriented professionals. Our programs will: 1) develop communityoriented professionals and citizens; 2) advance the state of knowledge about public policy problems and their solutions; 3) engage communities in the learning and problem solving process; and 3) educate future career professionals in the ethical principles of leadership and public service and approaches to facilitating positive urban change and development.

No matter what policy or social issue moves you to action, you can obtain the skills and knowledge you need to be in public service anywhere and in any position from our College. We combine theory with extensive practical experience so that you can become a leader who serves in the public, nonprofit or private sector. Service learning is a core element of the curriculum in the undergraduate program. Service learning is a teaching method built into individual courses which combines community service with academic instruction. It focuses on critical, reflective thinking; civic responsibility, and strengthening communities. Our program involves students in organized community service which addresses local needs, while developing their academic skills, sense of civic responsibility, and commitment to the community.

# Department of Sociology, Social Work, and Urban Professions 

Oscar Miller, Ph.D., Department Chair 212 Jane E. Elliott Hall 615-963-5511

Michael A. Wright, PhD., LAPSW
Director of Social Work
310 Jane E. Elliott Hall 615-963-7641

Faculty: R. Evenson-Newhouse, B. Kilbourne, M. Mahmoud, O. Miller, E. Rhodes, E. Sanford, J. Scales

General Statement: The Department of Sociology, Social Work, and Urban Professions offers three curricula leading to the Bachelor of Science degree in Sociology, the Bachelor of Science degree in Social Work, and the Bachelor of Science degree in Urban Studies. Since these are distinct degree programs, they are discussed under separate headings.

## Sociology Program

General Statement: Sociology is the study of group life. As a social science, it combines scientific and humanistic perspectives and research methods to identify, describe, explain, and understand the connections between the social forces that help shape who we are, what we believe, how we behave, and how we choose to live our lives. It examines how we shape our world through our interactions with others and by the choices we make, and how and why groups form, organize, achieve goals, and evolve. Key areas of inquiry include culture, identity, urban and rural life, socialization, family patterns and relationships, social change, racism, sexism, stratification and social class, economic systems, political power, law and social control, conflict, education, population, environment, technology and communications, health care and illness, social movements, community responses to disasters, life in organizations, and contemporary social issues. The knowledge and skills that are cultivated in the sociology curriculum are in high demand by business, industry, and government. Sociology majors should choose electives both in the field and outside the field to further enhance these skills.

Mission: The Sociology Program's mission is to prepare students for entry level professional employment in government, education, and business, industry, and community organizations- with emphasis on the acquisition of basic research skills. The program also prepares students for graduate and professional study in Sociology and other social science disciplines, and in law and business.

Objectives: students who successfully complete this degree will be able to: 1) understand the connections between the social forces that help shape society; 2) understand sociological concepts and theoretical perspectives on human social behavior; 3) use research and statistical methodology to better understand the social world and provide important information to public and private sector organizations and groups; 4) display leadership and critical thinking skills; and 5) ability to engage in a lifetime of learning.

Career Opportunities: Career opportunities include, but are not limited to, employment in local, state, and federal government, and social and community service agencies in the areas of housing, juvenile courts and juvenile and adult corrections,
urban and community planning/development, mental health and drug counseling, youth guidance, human services, and social research; and in business and industrial management and management trainee programs in retail, manufacturing, insurance, banking, utilities, journalism, and personnel.

Requirements for the Bachelor of Science Sociology 30 Semester Hours

General Education Core:
Communications (9 hours)

| ENGL 1010, 1020 | Freshman English I, II (minimum <br> grade of C in each) | 6 |
| :--- | :--- | :--- |
| COMM 2200 | Public Speaking |  |

Social and Behavioral Science (6 hours)
Elective From approved list. 3
Elective From approved list. 3
History ( 6 hours, choose any of the two below)

| HIST 2010 | American History I | 3 |
| :--- | :--- | :--- |
| HIST 2020 | American History II | 3 |

HIST 2030 History of Tennessee 3
Natural Science (8 hours)
Lecture and lab from approved list. 4
Lecture and lab from approved list. 4
Mathematics (3 hours)
One course from approved list. 3
Orientation (1 hour)
UNIV 1000 Orientation 1
Total General Education Hours 42

## Upper-division Admission

For admission into the upper-division program of the Sociology major, students must complete all of the requirements listed above under the General Education Core and Other Requirements; in addition, they must have earned at least a C in SOCI 2010. They must have removed all high school deficiencies, passed all required remedial/developmental courses, and earned a cumulative grade point average of 2.0 on college-level coursework.

## Major Core

Sociology majors must earn at least a C in all of the following courses. If they earn a $D$ or an $F$ in any of these courses, majors must repeat them until they earn at least a C.

SOCI 2010 Introduction to Sociology 3
SOCI 3000 Social Statistics (STAT 2910-2920, 3
PSY 2180, or QM may be substituted.)
SOCI $4900 \quad$ Classical Sociological Theory 3
SOCI $4910 \quad$ Contemporary Sociological Theory 3
SOCI $4990 \quad 3$
SOCI or ANTH Upper-division Electives 12
Minor Requirements: SOCI 2010 and 15 hours of upperdivision Sociology courses.

## Social Work Program

Faculty: D.Butler, R. Moore, and M. Wright.
Rationale: Tennessee State University has a service-mix area that includes all ethnicities, races and socioeconomic groups. The Nashville metropolitan area, including a small rural population requires a variety of social service agencies to serve this population. Additionally, Tennessee State University's student body and faculty originate from the United States and more than fifty countries. The Social Work Program is needed to provide leadership and to produce a reservoir of Social Work professionals who can serve diverse populations in Nashville, Middle Tennessee, the State of Tennessee, and the nation.

Mission: The Social Work Program prepares students for professional social work practice, leadership, and service in an urban setting. The Bachelor of Science in Social Work degree program promotes social and economic justice, the application of cultural competence, scholarly inquiry, and lifelong learning.

Core Values: The program provides leadership training for social service professionals in Metro Nashville and the surrounding region. The Core Values of the Tennessee State University Social Work program are consistent with the National Association of Social Workers (NASW) Code of Ethics core values. These values are actively prompted and modeled within the social work department and expected to be demonstrated by our faculty staff students, honored alumni, and advisory board. The core values include Service, Social justice, Dignity and worth of the person, importance of human relationships, integrity, and Competence.

Professional Expectations: The Tennessee State University Social Work program also maintains a list of professional expectations. These guidelines are modeled by faculty and staff, and expected of students. They are also used to identify challenges and support positive resolutions in student progress through the program and individual development through advising and, if necessary, disciplinary action. The professional expectations can be found in each syllabus and the field and student handbooks. The professional expectations require that students:

1. Identify as a professional social worker Demonstrate a Proactive Commitment to Learning Utilize Resources and Feedback with Efficacy Communicate Effectively with respect and cultural competence.
2. Apply Problem Solving and Critical Thinking Skills
3. Demonstrate Self-Awareness and Ethical Conduct
4. Manage a Healthy \& Balanced Lifestyle effectively Managing Stress

Program Goals: (1) Administer a social work educational program of the highest quality promoting a culture of collaboration, efficiency, effectiveness, and autonomy as a model within the university context and a competent collaborator in the community. (2) Create and maintain an environment of learning, development, diversity, justice, and opportunity for faculty, staff, and students. (3) Build and maintain quality curriculum consistent with accreditation by the Council on Social Work Education. (4) Evaluate the extent to which the program, implicit curriculum, and explicit curriculum objectives have been met.

Student Learning Outcomes: (1)Identify as a professional social worker and conduct oneself accordingly; (2) Apply social work ethical principles to guide professional practice; (3) Apply critical thinking to inform and communicate professional judgments; (4) Engage diversity and difference in practice; (5) Advance human rights and social an economic justice; (6) Engage in research-informed practice and practice-informed research; (7) Apply knowledge of human behavior and the social environment; (8) Engage in policy practice to advance social and economic well-being and to deliver effective social work services; (9) Respond to contexts that shape practice; (10) Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

The baccalaureate Social Work Program is the only public program in Nashville, Tennessee that prepares students for entry-level professional practice. It also prepares students for acquiring registration, certification, and licensure in social work.

Career Opportunities: Career opportunities include employment at the professional entry-level in social work positions in public and private agencies in the following areas: human services, public health, mental health, mental retardation, corrections, social services in hospitals and nursing homes, senior citizen centers, state and county social services agencies, public housing, adult protective services, child protective services, school social work, planned parenthood centers, and as resident managers and probation and parole officers.

Accreditation: The Social Work Program is accredited by the Council on Social Work Education (CSWE), the national accrediting agency to the profession. The Program has been accredited since 1974.

Admission and Exit Requirements: Students who wish to gain admission to the Social Work Program must meet the university admission policy, complete the university general education requirements, submit an application to be reviewed by the advisor, and earn a cumulative grade point average of 2.3 ( 4.0 scale) on college-level coursework. After the review of the formal application, the faculty advisor conducts an interview. The interview serves as the primary tool for exploration of student's knowledge of the profession of social work, motivation for selecting social work as a major, prior work or volunteer experiences, and future career goals. The advisor then meets with the faculty to decide on admission of student. Without formal admission to the program, students are not considered to be Social Work majors. Students who do not meet the quality point average requirement or who have failed courses in the general education area may be asked to reapply for admission at a later date, or may be admitted on a provisional basis. No academic credit is given for life experience or prior work experience. These procedures are all in addition to the procedures for upper-level admission outlined below.

Transfer Students and Transfer Credit: Credits in Social Work earned at other higher education institutions are accepted toward the Social Work degree at Tennessee State University on the same basis as work taken at TSU, provided the courses are of the same content and quality.

Departmental Requirements for Bachelor of Science in Social Work: 120 Semester Hours

A student must complete a minimum of 120 semester hours to receive a degree. A minimum of 60 of the semester hours must be in courses on the 3000 and 4000 level. A minimum of 45 semester hours is required in social work courses, 15 related liberal arts semester courses, 42 semester hours of general education courses, and 18 hours of other lower division required courses.

General Education Core:
Communications (9 hours)

| ENGL 1010, 1020 | Freshman English I, II (minimum grade of $C$ in each) | 6 |
| :---: | :---: | :---: |
| COMM 2200 | Public Speaking | 3 |
| Humanities and/or Fine Arts (9 hours) |  |  |
| ENGL 2013 | Black Arts and Literature | 3 |
| ENGL 2023 | Black Literature: Short Story and Novel | 3 |
| ART or Music 1010 | Art Appreciation, or Music Appreciation | 3 |
| Social and Behavioral Science (6 hours) |  |  |
| PSYC 2010 | General Psychology I |  |
| SOCI 2010 | Introduction to Sociology |  |
| History (6 hours) |  |  |
| HIST 2010 | American History I | 3 |
| 2020 | American History II |  |

Natural Science (8 hours)

BIOL 1010/1011 Introductory Biology I and lab
BIOL 1020/1021 Introductory Biology II and lab
Mathematics (3 hours)
MATH 1110
College Algebra I

Orientation (1 hour)
UNVI 1000 Orientation for Social Science Majors

## Total General Education Hours <br> 42

## Other Course Requirements:

ECON 2010 Principles of Economics I
POLI 2010 American National Government
3
PHIL 1030 Introduction to Philosophy: Contemporary
Moral Issues
RELS 2010 HUM Elective or
Introduction to Religious Studies
Free Electives

## Upper-division Admission

For admission into the upper-division program of the Social Work major, students must complete all of the requirements listed above under General Education Core and Other Course Requirements. In addition, they must have removed all high school deficiencies, satisfactorily completed all required remedial/ developmental courses, and earned a cumulative grade point average of 2.3 on college-level coursework.

## Professional Curriculum

In the professional phase of the Social Work Program, students must complete a minimum of 45 semester hours of Social Work courses, and 15 hours of related liberal arts perspective courses. Social Work majors must earn at least a C grade in the required social work courses. Students who earn less than a C grade must repeat them until they earn a C grade. Enrollment in Social Work courses 3300, 3350, 3400, 3450, 3500, 4601, 4800, 4850, 4100, 4200 and 4900 is limited to Social Work majors only:

| SOWK | 2010 | Introduction to Social Work <br> Social Work Interviewing Skills | 2 |
| :--- | :--- | :--- | :--- |
| SOWK | 2100 | Suman Behavior and the <br> SOWK | 3300 |$\quad 3$

To fulfill the need for more exposure in social welfare agencies, all students are required to have a participatory observation experience prior to field placement. During the sophomore year, all Social Work majors observe and participate in two social services agencies for a minimum of 30 clock hours. In the junior year, students complete two written agency profiles. Students participating in a regular volunteer program may use that experience in lieu of the observation and participation. Both requirements must be met prior to being admitted to field instruction program.

Students must spend a minimum of 400 clock hours (1 semester) in a field placement in an approved social service agencies and organizations, while registered for SOWK 4100 Field Education, SOWK 4900 Senior seminar and SOWK 4850 Social work Research II. This experience provides students with an opportunity to apply theory to actual practice under supervision and guidance of a qualified practitioner. Students are evaluated on the basis of their growth and development in relation to the program's formal educational outcomes. Students must have a cumulative grade point average of at least 2.3 and must have earned the grade of C or better in SOWK 2010, 2100, 3300, 3350, 3400, 3450, 3500, 4601, and 4800, and SOCI 3000, before being admitted to Field Education. No academic credit is given for life experience or prior work experience. Only Social Work majors are admitted to the field education program.

## Urban Studies Program <br> E-400 Avon Williams Campus <br> 615-963-7201

Faculty: J. Gibran, C. Robinson, K. Triplett
General Statement: The Urban Studies Program offers students the opportunity to learn a new approach to becoming committed, community-oriented professionals. Our programs will: 1) develop community-oriented professionals and citizens; 2) advance the state of knowledge about public policy problems and their solutions; 3) engage communities in the learning and problem solving process; and 3) educate future career professionals in the ethical principles of leadership and public service and innovative approaches to facilitating positive urban change and development.

The Urban Studies program is a unique undergraduate degree program combining current multidisciplinary knowledge with practical learning experiences. The program provides a broad foundation for future study in related areas such as architecture, business, criminal justice, law, planning, political science, psychology, and social work. Students are able to adapt their program of study to fit multiple academic and career interests. The program also offers a minor in nonprofit management. This minor was developed to meet national standards for professional nonprofit management. It also has a strong service learning component which provides students with enriching learning and service experiences in the nonprofit sector. Five three-credit courses are required in addition to an internship.
Service learning is a core element of the Urban Studies and Nonprofit Management curriculum. As stated above, service learning is a teaching method built into our courses which combines community service with academic instruction. It focuses on critical, reflective thinking, civic responsibility, and strengthening communities. Our program involves students in organized community service which addresses local needs, while developing their academic skills, a sense of civic responsibility, and a commitment to the community.
Mission Statement: We aim to improve public service by pursuing the following purposes:

1. Focus primarily on serving the professional needs of the public and nonprofit sectors by providing an education rich in the skills and knowledge of leadership and administration,
2. Provide an education which instills and reinforces the unique values of the public and nonprofit sectors,
3. Conduct research and service activities supportive of these educational purposes,
4. Serve the public and nonprofit sectors as a source for consultation, applied research, and knowledge about management and leadership issues,
5. Meeting the professional training and development needs of public and nonprofit professionals

Shared Values: The following reflects the shared values of the College of Public Service and Urban Affairs and the Urban Studies Program. These values are:

1. An appreciation of the value and rewards associated with public service.
2. An appreciation of the importance of citizen participation in community programs and actions which seek to enhance the quality of urban life.
3. An understanding of the importance of evaluating urban policies from the perspective of how they enhance contribute to enhancing the quality of urban life and promote social justice.
4. A commitment to the principle of sustainability as a standard for urban planning and managing healthy and sustainable cities.
5. A belief in the essential need for ethical, transparent, responsible, and responsive urban governance.

Student Learning Outcomes: Students graduating from the Urban Studies Program should be able to demonstrate achievement of the following learning objectives:

1. Describe the history of urbanization in the United States and how this history both influences and is influenced by social, cultural, economic and political processes.
2. Explain the significance and influence of geographic factors in shaping urban life.
3. Identify and describe the common theories used to explain such phenomena as urbanization, suburbanization, the experience of urban life, and urban crime.
4. Explain the general principles urban planning, the theories and methodologies of planning, and the different approaches to urban planning.
5. Describe the political processes at work in the urban world and explain how they interact with social, economic, geographic and other factors to shape urban life.
6. Identify social structures and expressions of urban life and evaluate how they are a product of, and interact with economic, political, geographic, and cultural variables.
7. Explain urban issues, trends and problems, and evaluate theoretical explanations of their sources and policy approaches to addressing these problems.
8. Identify and discuss the concept sustainability as a foundational objective for urban planning and community development.
9. Apply social science research methods and technology based tools to gather data and analyze data relating to urban issues, draw conclusions and present research in written and oral formats.

Communications (9 hours)
ENGL 1010, 1020 Freshman English I, II 6 (Minimum grade of $C$ in each)
COMM $2200 \quad$ Public Speaking
Humanities and/or Fine Arts (9 hours)
ENGL 2110-2230 Sophomore Literature Course 3
Elective One course from approved list. 3
Elective One course from approved list. 3
Social and Behavioral Science (6 hours)

SOCI
2010
History (6 hours)
HIST 2010
American History I
3
HIST 2020
American History II
3
Natural Science (8 hours)
BIOL 1010/1011 Introductory Biology I 4
BIOL 1020/1021 Introductory Biology II 4
Mathematics (3 hours)
MATH 1110 College Algebra I 3
Total General Education Hours: 41
Orientation (1 hour)
UNIV 1000 Orientation 1
Total Hours: 42

## Upper-division Admission

For admission into the upper-division program of the Urban Studies major, students must complete all of the requirements listed above under General Education Core and Other
Requirements. In addition, they must have removed all high school deficiencies, passed all required remedial/ developmental courses, earn a cumulative grade point average of at least 2.0 on college-level course work. They must also have earned a minimum grade of C in URBS 2010 and POLI 2020.

Major Core: A minimum of 30 semester hours with at least 27 hours at the 3000-4000 level. The required courses in the major core are:

| SOCI | 3000 | Social Statistics | 3 |
| :--- | :--- | :--- | :--- |
| SOCI | 4510 | Introduction to Social Research | 3 |
| URBS | 2010 | Introduction to Urban Studies | 3 |
| URBS | 3030 | Urban Policy \& Issues | 3 |
| URBS | 3670 | Urban History | 3 |
| URBS | 3910 | Urban Politics | 3 |
| URBS | 4250 | Urban Economics | 3 |
| URBS | 4600 | Urban Sociology | 3 |
| URBS | 4850 | Urban Geography | 3 |
| URBS | 4900 | Senior Project | 3 |

Students must also complete a minimum of 15 hours of electives at the 3000-4000 level. Students must earn at least a C in all major courses.

Community Leadership and Public Service Concentration: (18 Hours)
This concentration prepares students for leadership roles in the community, state, and local government. This cluster of courses builds professional leadership skills and highlights ethical and social issues with a strong focus on community service. A total of 18 credit hours are required from an approved list of courses, which includes, but is not limited to: URBS 3000, URBS 4700, MGMT 3010, MGMT 3400, MGMT 4250, PADM 3610, MGMT 4090; SOWK 4000. Note: MGMT 3010 is a prerequisite for other management courses.
Urban Policy and Planning Concentration: (18 Hours)
The Urban Planning and Policy concentration focuses on applying the tools of policy analysis and urban planning to
understanding urban issues and using the tools of urban planning to address these issues. Eighteen (18) credit hours are required from an approved list, which includes, but is not limited to URBS 4700, REUD 3130; REUD 3200; REUD 4100; AGSC 2510; AGSC 3580; AGSC 3550; AGSC 3590; AGSC 4090; CIVEN 3000; GEOG 3100; GEOG 3150. Note: REUD 3130 is a prerequisite for the other Real Estate Courses. AGSC 2510 is a prerequisite for the other GIS related AGSC courses.

Urban Diversity Concentration: (18 Hours)
This concentration includes a set of courses which introduce urban issues and policy alternatives from diverse social, cultural, economic and political perspectives. Students will explore the significance of these issues for diverse social, cultural, and minority groups. Four courses are required from an approved list, which includes, but is not limited to SOCI 2300; SOWK 3602; SOCI 4800; SOCI 3700; SOCI 3950, POLI 4900; GEOG 4440; GEOG 4300; COMM 4320; WMST 4100; AFAS 3620; AFAS 3650.

Minor Requirements: Students may earn a minor in nonprofit management by completing 15 hours of nonprofit management courses plus a 3 hour internship. See minor requirements below in this section of the catalog.

Suggested Four-Year Plan:
Bachelor of Science Degree in Sociology


Suggested Four-Year Plan:
Bachelor of Science Degree in Social Work
FRESHMAN YEAR

|  | FALL SEMESTER |  | HR |
| :--- | :---: | :--- | :---: |
| SPRING SEMESTER | HR |  |  |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Free Elective | 3 | Free Electives | 3 |
| BIOL 1010, 1011 | 4 | BIOL 1020, 1021 | 4 |
| MATH 1110 | 3 | ART or MUSC 1010 | 3 |
| SOCI 2010 | 3 | POLI 2010 | 3 |
| UNIV 1000 | 1 |  |  |
|  | 17 |  | 16 |
|  |  |  |  |
|  | SOPHOMORE YEAR |  |  |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| SOWK 2010 | 2 | SOWK 2100 | 3 |


| ENGL 2013 | 3 | ENGL 2023 | 3 |
| :--- | :---: | :--- | :---: |
| ECON 2010 | 3 | PHIL 1030 | 3 |
| COMM 2200 | 3 | HUM Elective | 3 |
| PSYC 2010 | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 |  |  |
|  |  |  | 15 |

JUNIOR YEAR

| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :---: | :---: | :---: | :---: |
| SOWK 3400 | 3 | SOWK 3350 | 3 |
| SOWK 3300 | 3 | SOWK 3450 | 3 |
| SOCI 3600 | 3 | SOWK 3500 | 3 |
| PSYC 3510 | 3 | ENGL 3106 | 3 |
| POLI 4200 | 3 | SOWK Elec., 3000/ 4000 Level | 2/3 |
|  | 15 |  | 14 or |

FALL SEMESTER HR SPRING SEMESTER HR
SOWK $4600 \quad 3$ SOWK 4850 2

SOWK $4800 \quad 3$ SOWK $4100 \quad 8$
SOWK Elec., 3000/4000 2/3 SOWK 42003
Level
SOCI $3000 \quad \frac{3}{12}$ SOWK $4900 \quad \frac{1}{14}$
Suggested Four-Year Plan:
Bachelor of Science Degree in Urban Studies

|  | FRESHMAN YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| UNIV 1000 | 1 | ENGL 1020 | 3 |
| ENGL 1010 | 3 | BIOL 1020, 1021 | 4 |
| Humanities/Fine Arts | 3 | Humanities/Fine Art | 3 |
| Elective |  | Elective |  |
| BIOL 1010, 1011 | 4 | Urban Studies Elective |  |
| MATH 1110 | 3 | 3 |  |
|  | COMM 2200 | 3 |  |
|  |  | 16 |  |


|  | SOPHOMORE YEAR |  |  |
| :--- | :---: | :--- | :---: |
| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| Urban Studies Elective | 3 | HIST 2020 | 3 |
| HIST 2010 | 3 | Urban Studies Electives | 9 |
| Social Science | 3 | Social Science General | 3 |
| General Ed. |  | Ed. |  |
| ENGL 2110-2220 | 3 |  |  |
| URBS 2010 | $\frac{3}{n n}$ |  | 15 |


| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :---: | :---: |
| Urban Studies Electives | 12 | URBS 3030 | 3 |
| SOCI 3000 | 3 | URBS 3910 | 3 |
|  |  | URBS 3670 | 3 |
|  |  | Urban Studies Electives | 6 |
|  |  |  | 15 |


| FALL SEMESTER | HR | SPRING SEMESTER | HR |
| :--- | :---: | :--- | :---: |
| Social Research | 3 | URBS 4850 | 3 |
| Urban Studies Electives | 12 | URBS 4600 | 3 |
|  |  | URBS 4250 | 3 |
|  |  | Urban Studies Elective | 3 |
|  |  | Senior Project | 3 |
|  |  |  | 15 |

## Course Descriptions

## Sociology (SOCI)

SOCI 2010 Introduction to Sociology (3). Introduction to sociology as a scientific discipline. Subject matter includes sociological concepts, sociological processes, and social institutions, including family and education. Course satisfies University social science requirement. Required of all Social Work and Sociology majors.

SOCI 2110 Honors Introduction to Sociology (3). Honors version of SOCI 2010. Enrollment limited to students in the University Honors Program.

SOCI 2300 Social Problems (3) (Formerly SOC 230). A course which teaches students to assess critically social issues and problems which negatively affect institutions, groups, and individuals. The thrust is to discuss and analyze these issues and problems using the major theories in sociology. (Formally SOC 330)
SOCI 2400 Courtship and Marriage (3) (Formerly SOC 240). A critical approach to problems of courtship, marriage, and the family, with emphasis on mate selection, marital roles and adjustment, economic problems, women and the family, and parent-child relationships. (Formally SOC 340)
SOCI 3000 Social Statistics (3) (Formerly SOC 300). Introduction to elementary statistics, with emphasis on analysis and interpretation of social survey data. Required of all Social Work and Sociology majors. Prerequisite: MATH 1013, 1110, 1120, 1410, 1710, 1730, 1830, 1910 or 1920.

SOCI 3101 Sex, Gender, and Social Interaction (3) (Formerly SOC 310). An examination of the difference between sex as a biophysical attribute of human beings and gender as a set of normativelyassigned attributes; sources and interpretations of the differences between sex and gender; and the relationships among sex, gender, and the way human beings participate in social roles. A writingintensive course.

SOCI 3200 Anthropology (3) (Formerly SOC 320). The nature of culture and society. Focus is on concepts and theories relating to social structure, social organization, ecology, changes, and the role of the individual.

SOCI 3330 Sociology of Law (3). The sociological study of the phenomenon of law as a normative order examined by different schools of thought, whether distinguished with specialized personnel for the use of coercive power from customs and conventions or an authority influenced by social, religious, and cultural obligations in the light of theoretical perspectives, conceptualization of law functions, organizations, and processes of law making and the legal profession.
SOCI 3350 Sociology of Health (3) (Formerly SOC 335). Examination of the social and psychological implications of illness from inception to termination. Materials are drawn from the relevant literature of the behavioral sciences that relate to health.

SOCI 3450 Cultural and Social Aspects of Health (3) (Formerly SOC 345). A study of the effects of the social and cultural milieu on the level of health of the community, including the nature, accessibility, and availability of health care services. Prerequisites: HCA 202 and SOCI 2010.
SOCI 3500 Social Psychology (3) (Formerly SOC 350). Analysis of the social act. Topics include socialization, symboling systems, social status and social role, personality, and small-group analysis and research.

SOCI 3550 Social Movements (3) (Formerly SOC 355). Development, organization, and function of social movements, especially ideology, leadership, and organization of political, religious, and other types of social movements.
SOCI 3600 The Family (3) (Formerly SOC 360). Development and change in the family as a social institution, examined through the use of cross-cultural materials. Topics include the development of family expectations and roles, cultural conditioning and learning, emotional interaction, mate selection, and family unity. Attention is paid to changes currently affecting the American family. Required of all Sociology majors.
SOCI 3700 Minority Group Problems (3) (Formerly SOC 370). Examination of the problems, relationships, and adjustments of racial, cultural, and ethnic minorities. Emphasis is on the nature of these phenomena as they occur in the American social setting.
SOCI 3750 Sociology of Sports (3) (Formerly SOC 375). Examination of social mobility, environmental adjustments, and problems of male and female athletes. Attention is paid to such factors as race, cultural background of ethnic groups, and other factors involved in apparent group superiority in some sports.

SOCI 3800 Industrial Sociology (3) (Formerly SOC 380). The human relations of modern business and industrial organization, the interdependence of technological and social factors, and implications for the individual as employee and citizen.
SOCI 3850 Political Sociology (3) (Formerly SOC 385). Sociological analysis of the American political system. Attention is given to the concept of power, elitist-pluralist controversy, end-of-ideology debate, and related topics. Prerequisites: completion of University Writing Sequence (HIST 2010, and 2020/2030)
SOCI 3950 Racism: A Sociological Analysis (3) (Formerly SOC 395). In-depth analysis of the historical development and perpetuation of racism in the society and examination of the influences of racism on the social institutions within the black community.
SOCI 3990 Comparative Law. An examination of critical studies on the American and foreign constitutional, judicial, and executive legal systems with emphasis on the similarities and differences in the structures, processes, functions, and analytical evaluations.
SOCI 4000 Criminology (3) (Formerly SOC 400). An examination of the problems of crime and criminals, the making of the criminal, the theories of crime and punishment, machinery employed in dealing with the criminal, penal and correctional institutions, and programs of correction. Case studies and visits to institutions serve as aids in enriching understanding. Prerequisite: admission to upper level.

SOCI 4100 Juvenile Delinquency (3) (Formerly SOC 410). Examination of theories of juvenile delinquency, the problems, causes, punishment, and correction of the delinquent. The course considers the machinery employed in dealing with the delinquent. Visits to institutions are made available. Prerequisite: admission to upper level.
SOCI 4150 Sociology and the Future. (3) (Formerly SOC 415). Methodologies for studying the future and their application to trends in population, organization, environment, technology, and the media. Alternative visions of the future are developed and evaluated. Prerequisite: admission to upper level.
SOCI 4200 Population Problems (3) (Formerly SOC 420). Growth and change in the composition and distribution of population in the world and in the United States. The course studies basic demographic concepts, theories of population growth and decline, and population policies. Prerequisite: admission to upper level.
SOCI 4300 Sociology of Child Development (3) (Formerly SOC 430). A course designed to give the student an understanding of the child as a growing organism, and how behavior is acquired; an introduction of symbolic interactionism and its application to socialization and identity; and a distinct sociological approach to behavior in relation to the family, play groups, school situations, and the community. Designed to acquaint prospective teachers and majors in Sociology with the influences of social institutions upon the child's total development. Prerequisite: admission to upper level.
SOCI 4400 Rural Sociology (3) (Formerly SOC 440). A cross-cultural examination of rural life in the past and the present, focusing on change and its processes. Prerequisite: admission to upper level.
SOCI 4450 Sociology of Religion (3) (Formerly SOC 445). Theories of nature, function, and structure of religion. Religion in America, including fundamentalism, the Black Church, and cults. How religion changes and is changed by secular society. In sum, the interrelationship of society, culture, and religion. Prerequisite: admission to upper level.
SOCI 4510 Introduction to Social Research (3) (Formerly SOC 451). Study of the theory and methods of social research. Topics include the formulation of hypotheses; techniques of collecting data, such as interviews, questionnaires, and surveys; and the computer analysis and interpretation of research data. Prerequisites: SOCI 2010 and 3000 and admission to upper level. Required of all Sociology majors.
SOCI 4600 Urban Sociology (3) (Formerly SOC 460). Growth of urbanism throughout the world, including internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas. Prerequisite: admission to upper level.
SOCI 4650 Complex Organizations (3) (Formerly SOC 465). Structure and function of formal organizations and the interrelationships of organizational variables, such as power, authority, influence, efficiency, hierarchy, and stability. Prerequisite: admission to upper level.
SOCI 4700 Social Stratification (3) (Formerly SOC 470). A study of social, sexual, and racial inequalities and their causes and consequences. Topics include class and ethnic ranking, discrimination, power, status, and social mobility in American society. Prerequisite: admission to upper level.

SOCl 4750 Introduction to Medical Sociology (3) (Formerly SOC 475). A survey of the major concerns of medical sociology and social psychiatry. Emphasis is placed on such topics as distribution of disease in society, the organization of the health professions, social change and health care, death and dying, stress and disease, and social factors affecting health services and their utilization. Prerequisite: admission to upper level.
SOCI 4900 Classical Sociological Theory (3) (Formerly SOC 490). An introductory survey of the development of the field of sociology during the nineteenth and early twentieth centuries. Major emphasis is placed on the intellectual traditions which gave rise to sociology as a separate discipline. Theorists include Comte, Marx, Weber, Durkheim, and others. Prerequisites: completion of University Writing Sequence
(HIST 2010, and 2020/2030), 12 hours of sociology credits or permission of instructor, and admission to upper level. Required of all Sociology majors.
SOCI 4910 Contemporary Sociological Theory (3) (Formerly SOC 491). A survey and analysis of the development of sociological theory in the twentieth century, with emphases on theory construction and theory in American sociology. Prerequisites: completion of University Writing Sequence (HIST 2010, and 2020/2030), 12 hours of sociology credits or permission of instructor, and admission to upper level. Required of all Sociology majors.
SOCI 4920 Black Thought: Social Theory I (3) (Formerly SOC 492). Introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought. Prerequisite: admission to upper level.
SOCI 4930 Black Thought: Social Theory II (3) (Formerly SOC 493). A continuation on SOCI 4920, an introductory theory course for students of all disciplines. Course deals with black thought and social theory from ancient to contemporary times. Provides knowledge of the contributions of black thinkers and theoreticians to sociological thought. Prerequisite: admission to upper level.
SOCI 4950, 4955, 4956, 4957Independent Studies and Reading (3, 3, 3, 3, 3) (Formerly SOC 495, 495A, 495B, 495C, 495D). Courses designed to allow students to work independently or in groups on topics of special interest not covered in depth in course offerings. Work may be done in a tutorial relationship with an individual faculty member or in a seminar. Prerequisites: admission to upper level and permission of instructor.
SOCI 4958 Internship (3). Internship in a setting that is research oriented; the student will write a report based on the internship. Prerequisites: SOCI 4510 and Department permission.
SOCI 4960 Topics in Sociology (3). One time, topical, or experimental course. Faculty may offer a course on an issue that becomes very topical because of current events, on a matter of their current research, or to develop a new course.
SOCI 4990 Senior Project (3) (Formerly SOC 4520). Designed to orient the student toward the systematic application of sociological knowledge and experience to a specific problem. The project-writing must be in one of the three following areas:

- Option A-- Supervised content analysis involving a critical, systematic examination and survey of literature dealing with one or more social problems. The outline of the problem to be examined must be approved before initiating the analysis. Prerequisites: SOCI 3000 and 4510.
- Option B-- Supervised internship program in which students conduct social research in conjunction with local community agencies. The purpose is to provide field experience in research related to urban organizations. Prerequisites: SOCI 3000, 4510, and 4600.
- Option C-- Supervised analytical project involving the critical examination of operations and functions of two or more community service agencies, private or public, for dealing with specific or multiple social problems within the framework of group dynamics; (2) survey of individuals' or groups' attitudes toward a social situation or problem. Research design must be developed and approved before project is initiated. Prerequisites: SOCI 3000, 4510, and admission to upper level.
SOCI 4990 is required of all Sociology majors.


## Anthropology (ANTH)

ANTH 2100 Human Prehistory (3) (Formerly ANTH 210). Introduction to the prehistory of man-findings and methods with special attention to the biological and cultural development of man up to the beginning of writing.
ANTH 2300 Introduction to Cultural Anthropology (3) (Formerly ANTH 230). The nature of culture and society. Content includes concepts and theories of social structure, social organization, ecology, change, and the role of the individual. Course may be used to satisfy the University requirement in social science.
ANTH 2350 Principles of Cultural Anthropology (3) (Formerly ANTH 235). Basic concepts and objectives in study of culture, including the range of cultural phenomena and approaches to its study. Prerequisite: ANTH 230. Formerly ANTH 330.
ANTH 3100 Comparative Social Structures (3) (Formerly ANTH 310). Principles of organization of persons into kinship, political, ritual, and other groups. Course includes analysis of rights and duties of persons according to institutional context. Prerequisite: ANTH 2300.
ANTH 3400 Religion of Primitive Peoples (3) (Formerly ANTH 340). Religions of non-literate peoples, including the place of religion in their social and cultural systems.
ANTH 3800 Language and Culture (3) (Formerly ANTH 380). Relationship between linguistic categories and patterns of culture. Prerequisite: ANTH 2300.
ANTH 4001 Special Topics (3) (Formerly ANTH 400). Student- or faculty-generated course. Scope of subject matter is determined by students and instructor. Prerequisites: admission to upper level and permission of instructor. A writing-intensive course.
ANTH 4100 Indians of the Southwest United States (3) (Formerly ANTH 410). Survey of Southwestern Indian cultures with emphasis on Pueblo society. Course examines the lifeways of Southwestern Indians before and after European contact. Prerequisites: admission to upper level and ANTH 2300 or consent of instructor.
ANTH 4550 Indians of the Southeast United States (3) (Formerly ANTH 455). Survey of Southeastern Indian cultures, with emphasis on aboriginal adjustment to environment and lifeways of Southeastern Americans prior to Euro-American contact. Prerequisites: admission to upper level and ANTH 2300 or permission of instructor.

## Social Work (SOWK)

Course marked with an asterisk (*) are required for Social Work majors. Courses marked with an M are limited to Social Work majors.
*SOWK 2010 Introduction to Social Work (2) (Formerly SW 201). Introduction to the generalist perspective of social work practice and the profession of Social Work. This course will help students develop a more authentic understanding and appreciation of the profession. Students will be exposed to what social workers do and the importance of considering the environmental context that surrounds all decisions.
*SOWK 2100 Social Work Interviewing Skills (3) (Formerly SW 210). Introduction to Social Work generic interviewing skills, essential facilitative qualities, and professional integrity. Emphasis on working with culturally and psychologically diverse, and oppressed client systems. Prerequisite: SOWK 2010.
*(M) SOWK 3300 Human Behavior and the Social Environment I (3) (Formerly SW 330). A bio-psychosocial examination of human beings from conception through old age and death. The focus is on humans as systems and the person - environment fit. Prerequisites: SOWK 2010, 2100, PSYC 2010. Co-requisite: PSYC 3510. Enrollment limited to Social Work majors only.
*(M) SOWK 3350 Human Behavior and the Social Environment II (3) (Formerly SW 335). A description and analytical examination of families, groups, communities and organizations as they affect and are affected by the social environment. Prerequisite: SOWK 3300. Enrollment limited to Social Work majors only.
*(M) SOWK 3400 Social Welfare Policy (3) (Formerly SW 340). Examination of the historical development of the social welfare system and the establishment and evolution of social welfare policies, practices and programs from 1500 to the present. Offered fall semester only. Prerequisites: SOWK 2010, HIST 2010 \& 2020, PHIL 1030. Enrollment limited to Social Work majors only.
*(M) SOWK 3450 Social Welfare Policy Analysis (3) (Formerly SW 345). A critical analysis of contemporary social policies and programs for social work practitioners. Emphasis is on developing and using a practical method for analyzing and interpreting current programs and policies directed at meeting human needs. Prerequisite: SOWK 3400, ECON 2010. Enrollment limited to Social Work majors only.
*(M) SOWK 3500 Social Work Practice I (3) (Formerly SW 350). Provide a comprehensive study to the general problem-solving method used in generalist social work practice with client systems of various sizes including individuals, families, groups, communities, and organizations. Prerequisites: SOWK 2010, 2100, 3300, PSYC 3510. Co-requisites: SOWK 3350, 3450. Enrollment limited to Social Work majors only.
*(M) SOWK 4601Social Work Practice II (3) (Formerly SW 360). Systematic use of the generalist perspective of social work practice and experiential use in working with groups, communities, and organizations from diverse populations, using the NASW Code of
Ethics in social work methods of intervention. This course is a continuation of practice sequence initiated in SOWK 3500. Prerequisite: SOWK 3500 Enrollment limited to Social Work majors only.
*(M) SOWK 4800 Social Work Research I (3) (Formerly SW 380). The rationale, principles, ethics, goals, methods, and techniques of the scientific research process in social work. Prerequisites: SOWK 3500, MATH 1110, and BIOL 1010 \& 1020. Enrollment limited to Social Work majors only.
*(M) SOWK 4850 Social Work Research II (2) (Formerly SW 385). The development and implementation of a practice-related research design. Emphasis is on data collection, data analysis, and reporting of data collected in field placement. Prerequisite: SOWK 4800. Corequisites: SOWK 4100, 4200. Enrollment limited to Social Work majors only.
SOWK 4000 Social Work Intervention in Health (2) (Formerly SW 400). A course designed to acquaint the student with the symptoms, etiology, and physical and emotional aspects of acute and chronic diseases, illnesses, and disabilities, with the development of comprehensive medicine involving the whole person in his or her milieu. Emphasis is placed on acquiring knowledge regarding social aspects of illness, as well as use of community resources for the continuation of preventive methods. One hour per week is devoted to participatory observation at a health-related agency. Prerequisite: admission to upper division.
*(M) SOWK 4100 Field Education (8) (Formerly SW 410). Field instruction to provide the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for entry-level professional social work practice. Supervision in the field is provided by a qualified practitioner committed to undergraduate social work education. Students are required to spend a minimum of 400 clock hours in an educationally oriented field practicum. Seniors are admitted after the completion of a formal admission process, including recommendation by the student's advisor. Prerequisites: completion of general education core, SOWK 2010, 2100, 3300, 3350, 3400, 3450, 3500, 4600, 4800, SOCI 3000. Co-requisites: SOWK 4850, 4200. Enrollment limited to senior Social Work majors only.
*(M) SOWK 4200 Field Education Seminar (3) (Formerly SW 420). A course to give students in field instruction an opportunity to discuss and share agency experiences and to relate social work theory to direct field practice. Discussion in the Seminar moves from the level of personal experiences to abstraction. Co-requisites: SOWK 4850, 4100. Enrollment limited to Social Work majors only.

SOWK 4401 Child Welfare 1: Introduction to Programs, Policies and Practice (3) (Formerly SW 440). This course is the first in a series of two child welfare courses offered as part of the TN Child Welfare Certification Program. The course introduces students to knowledge of child maltreatment and the juvenile justice system. It provides an overview of the child welfare system describing the history, policies and programs, both state and federal, pertinent to child maltreatment and juvenile offenders to intervene with families in crisis. It is intended to provide a foundation in the knowledge and values necessary for professional child welfare practice and prepare students for the second course in the series, Child Welfare II: Skills for Solutions and Permanency for Children and Families. Prerequisite: admission to upper division.

SOWK 4461 Child Welfare II: Skills for Solutions and Permanency for Children and Families (3) (Formerly 446) This course is the second in a series of two child welfare courses offered as part of the TN Child Welfare Certification Program. It is designed to assist students in acquiring the practice skills to become culturally competent child welfare workers. The course will analyze the practices of various human/social services agencies that provide preventive case management, out of home care, treatment, and rehabilitative services aimed at children and youth. The role of social services in the broad context of formal and informal systems that influence the life course of the child will be addressed. Students will be prepared to practice in the child welfare field by teaching them about the various contexts in which child welfare practice takes place and the skills and modalities that are used with children, youth, and families who are the focus of child welfare intervention. Particular emphasis will be placed on the services, and the juvenile justice system; and working with multicultural populations including consumers of different ages, races, cultures, socioeconomic status and sexual orientations. The course will also address critical frameworks for resolving ethical dilemmas, preparing students to resolve ethical issues confronted by social workers. Prerequisites: Child Welfare
SOWK 3601 Ethnic and Minority Concerns in Social Work (2) (Formerly SW 460). A course designed to emphasize the general method of social work practice with ethnic minorities. Focus is on the

African-American community and the issues of multiculturalism. Prerequisite: admission to upper division.

SOWK 4700 Gerontological Social Work (3) (Formerly SW 470). A course designed to examine the aging process and its impact upon the individual, the family, and society. Emphasis is placed on the physical, psychological, and sociological aspects of aging. An interdisciplinary approach is used in dealing with these aspects to enhance and enrich the understanding of the life process. Prerequisite: admission to upper division.
*(M) SOWK 4900 Senior Seminar in Social Work (1) (Formerly SW 490). A course designed to: (1) initiate areas of interest through discussion; (2) emphasize new trends and contributions to the field; and (3) familiarize students with the various examinations and other techniques for gaining employment and admission to graduate school. Co-requisite: SOWK 4100, 4200, 4850. Enrollment limited to Social Work majors only.
(M) SOWK 4950 SW Readings and Research (3) (Formerly SW 495). Independent study and research under faculty guidance for students who desire to do special projects. Prerequisites: junior or senior standing and permission of instructor. Enrollment limited to Social Work majors only.

## Urban Studies (URBS)

URBS 2010 Introduction to Urban Studies (3). An introduction to the study of cities and metropolitan areas that focuses on the interdisciplinary nature of the field. Readings from the fields of Economics, Geography, History, Political Science, Sociology, Social Work, and Health Sciences are included with a special focus on the multi-racial, ethnic and cultural forces that have shaped the city. Various policy issues facing urban areas will also be examined. A service learning component is part of the course requirement.

URBS 3000 Community Leadership and Public Service (3). This course is a practical study of leadership and organizing for social change. It focuses the essential characteristics and dimensions of leadership, and how leaders can build on community experiences and values to facilitate positive change and development. Subject matter includes topics such as the characteristics of successful leaders; the role of leadership in promoting positive change; ethical principles of leadership and public service; common community development issues; community organizing techniques; issues of power and powerlessness; and the role of leadership in mobilizing community power for the purposes of promoting social change and public welfare.

URBS 3030 Urban Policy and Issues (3). This course is an introduction to contemporary problems cities face and the various policy approaches to tackling these problems. Topics include policy issues such as poverty, unemployment, welfare, economic development, housing, education, crime, urban growth and development, transportation, health, environment, and planning. The course examines the causes and consequences of these problems and provides students with an introduction to the implications of these policy issues for both for governments for urban citizens. It also addresses emerging policy issues and the future challenges facing cities in contemporary society. This course is an elective for the Bachelor of Science in Urban Studies.

URBS 3670 History of Urban America (3). An interdisciplinary course which focuses on the political, sociological, economic, demographic, and geographic factors that contributed to the historical development of urban cultures in the United States.

URBS 3910 Urban Politics (3). Examines the principal urban problems, their causes, and public policies that deal with them. The course is designed to acquaint students with the ideas of the major writers on such aspects of urban communities as the role and development of cities; their government administration and finance; urban planning and design; poverty and slums; ethnic, race and class relations; the administration of justice; urban mass transit; and the quality of life in the urban environment.
URBS 4050 Urban Design (3). This course introduces the fundamental physical processes involved in forming communities. It provides a comprehensive introduction and overview of community design policies, processes, and focuses on relevant current issues that significantly impact on our nation's future, social, economic, and environmental contexts. Students will be challenged to widen their perspectives of the urban context as they come in contact with it in everyday experiences and activities. Instruction will take place online and on ground, and will include off campus class 'field trips' to downtown Nashville's community places and spaces. There are no prerequisites.
URBS 4520 Urban Economics (3). Urban history, location theory, city growth, and urban problems. Prerequisites: ECON 2010 and 2020.

URBS 4600 Urban Sociology (3). Urban Sociology examines the growth of urbanism throughout the world, including internal structure of the city, metropolitan areas, urban fringe and suburban areas, and analysis of social institutions in urban and metropolitan areas. Prerequisite: admission to upper level.

URBS 4850 Urban Geography (3). This course focuses on cities as Geographic units, including functions and structures, with attention to urban growth patterns, socioeconomic structures and functions, rural/urban relationships, and contemporary trends.

URBS 4890 Applied GIS for Urban Studies (3 credit hours). This course covers the concepts and principles of thematic mapping and geospatial information analysis for urban studies. It includes the principles for classifying and integrating data from multiple interdisciplinary databases for application to urban studies. Students will also be introduced to different methods of geospatial information analysis, geospatial analysis software tools, and methods for successfully communicating data and analysis for use by urban planners and other urban professionals.
URBS 4900 Senior Project (3). The Senior project orients students towards the systematic application of knowledge from the Urban Studies program to a specific urban issue or policy problem. Students may select from one of the following options for their project paper:

Option A. Supervised analysis involving a critical, systematic literature review dealing with one or more urban issue or policy problem area. Research proposals must be reviewed and approved before students initiate research.

Option B: A supervised internship with an organization within the domain of federal, state or local government, or with a nonprofit organization.

Option C. A supervised research project involving the critical analysis of a program dealing with an urban policy issue and implemented by a nonprofit or an urban government agency. Prerequisite: URBS 3030, admission to upper level and approval by Advisor.

URBS 4990. Independent Study in Urban Studies (1-3). An advanced individual study or research conducted under the supervision of the faculty. Students design and execute independent projects that are not a part of the regular curriculum. The number of hours will be determined by the scope of the subject matter and the number of enrolled hours. Prerequisites: Junior or senior status and approval by Department Chair.

URBS 4905 Internship (3). A supervised internship in a public or nonprofit agency serving the urban community. One hundred and fifty (150) hours of work with the interning agency are required to complete the required three credit hours. The student will receive one credit hours for every 50 hours of agency service. Prerequisites: Senior standing, admission to URBS upper division program, URBS 2010, and Research Methods course.

Nonprofit Management Course Descriptions

NPMN 2100 Introduction to Nonprofit Organizations (3). The United States has one of the most vibrant nonprofit communities in the world. Focus will be on the history of voluntarism in a democratic society and the function and purpose of volunteer and social service agencies. Students also learn about the role of nonprofit organizations in fostering community development and in-depth community relationships. This course is required to obtain a minor in Nonprofit Leadership and Management. It is also a prerequisite for other nonprofit courses.

NPMN 3100 Volunteer Management and Board Development (3). Students will examine the concepts, issues and significance of the "voluntary sector," including recruitment, placement, and volunteer development. Ion; this course, they will also examine the role of nonprofit board of directors, how they can best relate to professional staff, and how to identify volunteer leadership needs. This course is required for the minor in Nonprofit Leadership and Management. Prerequisite: NPMN 2100.

NPMN 3500 Fundraising and Grant Writing (3). Since most nonprofit organizations only "earn" a portion of their income, they must depend on raising funds and writing grants to sustain their operations. In this course, students will explore fundraising techniques, developing a fundraising plan, and learn how to write basic grants. Prerequisite: NPMN 2100.

NPMN 4100 Finance and Management (3). Examining the differences between for-profit and nonprofit organizations, students in this course will study principles and practices in basic nonprofit accounting and financial management. Students will explore best practices guidelines for managing and leading nonprofit organizations. This course is required to obtain a minor in Nonprofit Leadership and Management. Prerequisite: NPMN 2100.

NPMN 4500 Marketing and Community Awareness (3). This course is designed to give students the opportunity to learn and apply the principles, processes, strategies and tactics that are required to plan and implement an effective marketing operation. It includes such topics as public relations, the role of community outreach, conducting
community needs assessments, the importance of the role of advocacy, and lobbying in the nonprofit sector. This course is an elective in the nonprofit minor. Prerequisite: NPMN 2100.

## Nonprofit Management Minor

## Coordinator: Cara Robinson, Ph.D. F-401 Avon Williams Campus 615-963-7243

This minor can be taken by students in any undergraduate degree program. This minor provides very relevant complementary knowledge and skills for students in diverse areas of study, such as Early Childhood Education, Social Work, Accounting, Human Performance and Sports Sciences, Sociology, Political Science, Geography, Business Management, Criminal Justice, communications, and Health Care Administration and Planning. The courses in this program provide students with a thorough foundation in all the competencies required by the Nonprofit Leadership Alliance.
The Alliance is a nationally recognized certifying body for nonprofit management and leadership studies.

## Course Requirements

## Required courses:

NPMN 2100 Introduction to Nonprofit Organizations
NPMN 3100 Volunteer Management and Board Development.
NPMN 3500 Fundraising and Grant Writing
NPMN 4100 Finance and Management
NPMN 4500: Marketing and Community Awareness
URBS 4905 Internship
Total Hours:
18

## Aerospace Studies

Commander: Lavern Curry, Lt. Colonel, USAF Air Force ROTC Detachment 790, Kean Hall<br>(615) 963-5975

## General Statement

The Air Force Reserve Officer Training Corps (AFROTC) is the largest and oldest source of commissioned officers for the U.S. Air Force. AFROTC's mission is the following: To produce leaders and better citizens for America. AFROTC headquarters is at Maxwell Air Force Base, AL. We teach our students the same curricula that future officers learn at the U.S. Air Force Academy and Officer Training School. Additionally, planners have designed the AFROTC program to recruit, educate, and commission college students based on U.S. Air Force (USAF) requirements. As of August 2002, over 140 ROTC detachments are located on college and university campuses throughout the U.S. and Puerto Rico.
Through cross-town or consortium agreements, students from various universities and colleges in middle Tennessee participate in AFROTC at Detachment 790. Students may enter in their freshman, sophomore, junior, or senior academic year. We also have opportunities for graduate students. Please consult our web site at URL: http://www.tnstate.edu/rotc for a list of schools that we service, scholarships, and other information concerning our program.

## General Military Course (GMC)

For students who enter as freshmen, the first two years of AFROTC, the General Military Course (GMC) consists of one hour of classroom work and two hours of leadership laboratory each week. Note that your institution may accept two courses in Aerospace Studies in lieu of two courses in Physical Education. Please consult your counselor for details. Any fulltime student can participate in AFROTC GMC provided they
meet age requirements. Non-scholarship GMC cadets are under no service obligation Upon completion of GMC requirements, cadets who wish to compete for entry into the last two years of the program, the Professional Officer Corps (POC), must do so under the requirements of the POC selection. This process uses qualitative factors, such as grade-point average, cadre evaluation, aptitude, and physical fitness test scores to determine a cadet's potential for service in the USAF. After selection, students must successfully complete a four or five-week, summer field training encampment at an assigned USAF base before entering the Professional Officer Corps.

## Professional Officer Course (POC)

Cadets enrolled in the Professional Officer Course (POC) attend class three hours per week and participate in a weekly leadership laboratory lasting two hours. In the POC, cadets apply what they have learned in the GMC and at field training encampment.

The Commandant of Cadets entrusts POC cadets to lead the leadership laboratories. The underlying goal of the leadership laboratory is for POC cadets to teach GMC cadets how to perform as airmen and master general military customs and courtesies.

POC class sizes are small. The instructor places emphasis on group discussions and refining communication skills. Classroom topics include leadership, management, communication, and U.S. national defense policy. Once enrolled in the POC, cadets enlist into the Air Force Reserve and incur a service obligation. This entitles them to a monthly, nontaxable subsistence allowance currently $\$ 350.00$ the first year of the POC and $\$ 500.00$ the second year of the POC.

## Field Training

Field Training is, in most cases, a cadet's first exposure to a working USAF environment. The goal of Field Training is to develop military leadership and discipline and refine the skills cadets learned in the GMC. The Field Training environment allows commissioned officers to evaluate each cadet's potential to serve as an officer. Field Training includes aircraft and aircrew orientation, USAF professional development orientation, marksmanship training, junior officer training, physical fitness, and survival training. The USAF provides uniforms, lodging, and meals at no cost to the cadet.

## University Credits and Curriculum

Students must work with their institutions and departments to determine whether AFROTC classes will receive core, core elective, general elective, or any credit at all. A Tennessee State University minor in Aerospace Studies consists of 22 semester hours and is available to those students who successfully complete GMC and POC curricula. A minor may also be obtained at the other institutions.

*Cadets may take this course at any time during their junior or senior years. However, they must select from 300 to 400 level Social Science offerings.

## Course Descriptions <br> Aerospace (AERO)

AERO 1010, 1020 The Foundations of the United States Air Force, is a survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, USAF officer opportunities, and an introduction to communication skills.

AERO 2010, 2020 Air Power History is designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the war on terrorism. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF and space power.

AERO 3510, 3520 Air Force Leadership Studies, is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply advanced leadership and management principles.

AERO 4510, 4520 National Security Affairs/Preparation for Active Duty, examines the U.S. national security process, regional studies, advanced leadership ethics, and USAF doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting the military. Within this structure, we continue to emphasize the refinement of communication skills.

AERO 1011L-2021L; 3511L - 4521L Leadership Laboratory, all cadets enrolled in the GMC or POC must take leadership laboratory each semester. The one and one half hours per week is typically taken throughout a cadets' enrollment in AFROTC. Instruction is conducted
within the framework of an organized cadet corps with a progression of experiences designed to develop each cadets' leadership potential. Leadership Laboratory involves a study of USAF customs and courtesies; drill and ceremony; career opportunities in the USAF, and the life and work of an USAF officer. Cadets develop advanced leadership skills in a practical laboratory. Co requisite: Cadets must enroll in the equivalent Aerospace Studies class.

# Army Reserve Officer Training Corps (ROTC) - Offered at Vanderbilt University 

Commander: Kenrick Smith, MAJ, USA<br>PMB 366, 230 Appleton Place, Nashville TN<br>(615) 322-8559

The Army Reserve Officers' Training Corps (ROTC) is a sequential and progressive academic program that provides pre-commission training for college-educated men and women who desire to serve as commissioned officers in the active Army, Army Reserve, and Army National Guard. As the Army's largest commissioning source, it fulfills a vital role in providing mature young men and women for leadership and management positions in an increasingly technological Army. Admission is open to both men and women who meet mental, moral, and physical qualifications.
Training goes beyond the typical college classroom and is designed to build individual confidence and self-discipline, instill values and ethics, and develop leadership skills. The course load consists of one course per semester. Each succeeding year will address course topics in greater depth as students receive feedback on their leadership style and assume positions of greater responsibility within the program. Graduates are commissioned as Second Lieutenants and will enter active duty with follow-on employment in the Army Reserves, National Guard, or active duty. Educational delays may be granted for graduates who desire to pursue advanced degrees prior to entry on active duty.

All university students in the Nashville area may participate in the Army ROTC program at Vanderbilt University. While Vanderbilt serves as the host university, students at partnership schools are not charged additional tuition to take military science courses. Grades are transferred back to each university and added to the students' transcripts.
Scholarships. Students can earn merit scholarships in several ways. High school seniors and graduates compete for fouryear scholarships that are determined by local competition among Vanderbilt applicants. Although determined locally, the application process is centrally managed. Scholarship students receive financial benefits that cover the cost of full tuition scholarships each year, an annual $\$ 1,200$ book allowance, all uniforms, and a monthly tax-free stipend beginning at $\$ 300$ for freshmen and increasing to $\$ 500$ for seniors. Vanderbilt University also provides Vanderbilt ROTC scholarship students an additional \$3,000 tuition grant each year for room and board (\$6,000 each year beginning with the class of 2013). Students who are not on scholarship receive the monthly stipend during their junior and senior years. All students enrolled in the Army ROTC program are provided textbooks and uniforms at no expense.
Contracted non-scholarship students also receive the monthly stipend from $\$ 300$ to $\$ 500$ depending on the academic level. For more information, see the Web site at www.armyrotc.com.

Summer training: Students have the opportunity to attend several training events over the summer.
Leadership development and assessment course (LDAC) This five-week leadership exercise at Fort Lewis, Washington, is a commissioning requirement. This is normally done between the junior and senior years. Travel, room, and board are provided free, and cadets are paid approximately $\$ 700$.
Cultural Understanding and Language Program (CULP) Internships -Students are encouraged to spend a semester, special or summer session in academic studies abroad if feasible. Special incentives are available to further attract qualified students to these valuable programs.
Cadet Troop and Leadership Training Internships (CTLT) CTLT Internships are leadership development opportunities for students who are placed with military organizations throughout the world to gain perspective and understanding or the role of the military officer.

Cadet Professional Field Training(CPFT) - Airborne, Air Assault, Mountain Warfare, Robin Sage (US Special Forces), Helicopter Flight Training, and Sapper.
Other training opportunities exist for qualified applicants who are interested.

Commissioning and career opportunities. A commission in the U.S. Army is a distinctive honor earned through hard work, demonstrated commitment, and a desire to serve the nation. Post-graduate military education, usually starting within six months of graduation and commissioning and continuing through the officer's service career, begins with the basic officer leadership course followed by officer basic course that qualify new lieutenants in their specific branch of service. Education delays are available for critical specialties requiring postgraduate civilian education such as law and medical degrees.

## Military Science Department Commanding Officer, James R. Wilburn

Military Instructors, Adam, Tweedell, Jeff Erdley, Clinton P. Mead, Mark Peckham, Anthony Hanlon

## Military Science Courses

During the four-year program, Army ROTC students complete eight courses of military science. Academic credit varies by school.

FRESHMAN YEAR
FALL, SPRING. [2]
MSVU 1010. Leadership and Personal Development \& Lab
FALL, SPRING. [2]
MSVU 1020 Introduction to Tactical Leadership \& Lab
SOPHOMORE YEAR
MSVU 2010. Innovative Team Leadership [2]
MSVU 2020. Foundations of Tactical Leadership [2]
JUNIOR YEAR
MSVU 3010. Adaptive Team Leadership* [3]
MSVU 3020. Leadership in a Changing Environment*[3]
SENIOR YEAR
MSVU 4010. Developing Adaptive Leaders*[3]
MSVU 4020. Leadership in a Complex World*[3]

* Note: Prerequisite required to enroll

Information: Inquiries regarding enrollment in the Army ROTC program should be made to the Army ROTC Admissions Officer at (615) 322-8550 or (800) 288-7682,1-800-VUROTC. Also see www.vanderbilt.edu/army.

## Naval Reserve Officer Training Corps (NROTC) - located at Vanderbilt University

Commander: Scott Karverath, CAPT, USN<br>1114 19 ${ }^{\text {th }}$ Ave South, Suite 200,<br>Nashville, TN 37209

(615) 322-2671

The Naval Reserve Officer Training Corps (NROTC) unit at Vanderbilt serves students from Vanderbilt, Tennessee State, and Belmont Universities. The Naval Officer Education program provides challenging academic courses and experience-building events to prepare a select group of highly accomplished students for the opportunity to serve their country as a Navy or Marine Corps officer, while receiving an education.

The primary focus of the NROTC program is to develop the most capable leaders possible by building upon a core of academic strength, while providing essential military and leadership education. Students may participate in the NROTC unit, through the scholarship program, the college program, or the naval science program. Scholarship students take the prescribed naval science course each semester, participate weekly in naval science lab, and engage in a four-week, summer training program after each academic year. The college program is identical to the scholarship program except for tuition financial benefit and that students only participate in summer training upon completion of their junior academic year. Any student may take any or all of the naval science courses without participating in naval science lab or summer training; however, all courses are taught at the Vanderbilt campus.

Scholarship students receive tuition, fees, uniforms, \$375 per semester for textbooks, and a monthly stipend beginning at $\$ 250$ for freshmen and increasing to $\$ 400$ for seniors. College program students are provided with uniforms, textbooks for naval science courses, and, upon commencement of their junior year, a monthly stipend of \$350.

Scholarships: Students can earn scholarships in several ways. Four-year scholarships are determined by national competition among high school seniors and graduates. Based on the national ranking, students may be awarded a scholarship that covers full tuition. The application process begins as early as the spring semester of the student's junior year of high school, but no later than early January of the year prior to admission. (College students who have completed less than 30 semester hours or less than 45 quarter hours of college credit may also apply for the national four year program.)

College program students can be nominated for three and two-year scholarships by the NROTC unit. These nominations are based on the students' academic and military performance at the college level. Sophomores not enrolled in the college program are eligible to apply for the two-year NROTC scholarship program. This is a national competition and application is made through the NROTC unit. Those selected will attend a six week naval science program during the summer prior to joining the NROTC unit in their junior year.

Service obligation: At the beginning of their sophomore year, should they choose to continue with the NROTC program, Navy scholarship students incur a service obligation of five years active duty and three years inactive reserve to be served upon graduation or withdrawal from the program. Marines and Nurses incur a service obligation of four years active duty and four years inactive reserve. College program students incur a three-year active duty and five-year inactive reserve commitment upon graduation or withdrawal from the program.

Summer training: Summer training of about four weeks is conducted aboard naval vessels and naval shore stations after each of the first three academic years. Scholarship students are normally required to participate each year. All scholarship and college program midshipmen are required to participate in summer training prior to their final academic year.

Course credit: During the four-year program, NROTC students are required to complete a maximum of eight courses (24 hours) of naval science. Academic credit awarded varies by school and is outlined below.

## Course Descriptions

NROTC students will complete the following Naval Science courses:

NS 100 Introduction to Naval Science (3) An in depth introduction into the organization, missions, roles, tasks, and operating methods of the Navy and Marine Corps. Topics include Navy/Marine Corps terminology, an overview of the military justice system, and an overview of the major components in the Navy/Marine Corps team. The Navy's relationship to the other services within the Department of Defense is emphasized.

NS 121 Ships Engineering Systems (3) A detailed study of ship characteristics and type including ship design, hydrodynamic forces, stability, compartmentalization, propulsion, electrical and auxiliary systems, interior communications, ship control and damage control. Included are basic concepts of the theory and design of steam, gas turbine and nuclear propulsion. (Navy Options)
NS 130 Ships Weapon Systems (3) A detailed study of the theory and employment of weapon systems. The student explores the processes of detection, evaluation, threat analysis, weapon selection, delivery, guidance and explosives. Fire control systems and major weapon types are discussed; including capabilities and limitations. The facets of command, control and communications are explored as a means of weapon system integration. (Navy Options)
NS 131 Sea Power in History (3) An introductory survey of the U.S. Navy's role in foreign and defense policies from the American Revolution to the present. The course also examines the broad principles, concepts, and elements of sea power throughout history. Key points will include technological advances, interservice relations, strategies, and governmental policies pertaining to sea power.
NS 231 Navigation (3) An in-depth study of piloting and electronic navigation; including theory, principles and procedures. Students learn aspects of piloting including the use of charts, visual and electronic aids, and theory and operation of magnetic and gyrocompasses. Other topics discussed include tides, currents, effects of wind and weather, plotting, use of navigation instruments and types and characteristics of electronic navigation systems. (Navy Options)
NS 232 Naval Operations (3) A study of the relative-motion vector analysis theory, relative motion problems, formation tactics and shipboard operations. Also included are introductions to naval communications, ship behavior and maneuvering characteristics, and applied aspects of ship handling. (Navy Options)

NS 231M Evolution of Warfare (3) Fall semester Alt yrs.; 3 cr. Evolution of weapons, strategy, tactics and material; the classic principles of war by study of selected battles and campaigns; survey of military and foreign policy, basic strategic concepts, and principles of warfare. Includes lab. Open to all students on a space avail basis. (Marine Options)
NS 241 Organization and Management (3) Introduction of the theory and techniques of naval leadership based on those principles of behavioral science that are pertinent to understanding individual and group behavior of adults. Introduces the management process and the relationship of management functions to leadership. Studies the organization, systems, and techniques employed in the Navy for management of its human, material, and financial resources. Investigates moral responsibilities on the part of leaders.
NS 241M Amphibious Warfare (3) Fall semester Alt yrs.; 3 cr. History of amphibious warfare and the development of the concepts, principles, and techniques of amphibious operations through study of selected examples from modern history. Includes lab. Open to all students on a space avail basis. (Marine Options)

NS 242 Naval Leadership and Ethics (3) An in depth study of the moral foundations of leadership. Historical overview of major philosophical movements with emphasis on moral obligation.

Examination of moral and legal obligations with respect to the Law of Armed Conflict, Code of Conduct, and the Constitution. Focus on the importance of integrity, moral courage, and ethical behavior as they apply to leadership. Review of interrelationship between authority, responsibility, and accountability. Practical application reviews of leadership and ethics using applicable case studies.

Additional Courses Required for Navy/Marine Scholarship Students. The following courses are required for NROTC students who are on scholarship:

1. Calculus (Navy option only) (6 credits minimum): Must be completed by the end of the sophomore year.
2. Physics (Calculus based) (Navy option only) (6 credits): Must be completed by the end of the junior year.
3. English (6 credits) (Navy option only): Two semesters of any English course or courses consisting of a writing component.
4. American History/Political Science (3 credits): Contact the Naval ROTC unit for a listing of courses fulfilling this requirement
5. World Studies (3 credits) (Navy option only): Contact the Naval ROTC unit for a listing of courses fulfilling this requirement.

Information: Inquiries regarding enrollment in the Naval ROTC program should be made to the Naval ROTC unit recruiting officer at (615) 322-2671 or (800) 288-0118. Admission to the program is open to both men and women. Physical qualification to meet Naval Service standards is required.

## Testing Center

Brenda Coleman, M.S., Director
Lewis R. Holland Hall, Suite 200
(615) 963-5991
www.tnstate.edu/testing
The TSU Testing Center is a service unit within the Division of Enrollment Management and Student Support Services and it administers both paper-and-pencil tests and computeradministered, standardized tests that support the academic programs of the University and address community needs for admissions tests, distance learning, workforce development, credentials, and licenses. Services provided through the Testing Center are available to TSU students and members of the community. The Testing Center provides special accommodations for test candidates with appropriately documented disabilities. The TSU Testing Center is a member of the National College Testing Association and of the Consortium of College Testing Centers, a network that facilitates distance education nationally and internationally.

Various testing services are provided at the following locations:

- Testing Center Office: (615) 963-5991 - Lewis R. Holland Hall, Suite 200
- ETS/Prometric and Pearson VUE Labs: (615) 9637386 - Avon Williams Room 220
- Testing Center Lab: (615) 963-1481 - Holland Hall Room 310


## Student Assessment

The Testing Center facilitates admission to the University by administering the ACT on all national testing dates. During orientation and registration the Testing Center administers the University Diagnostic Tests and the placement test, COMPASS, for all students who are required to take them. Many students elect to earn credit by examination and the Testing Center routinely administers the CLEP (College Level Examination Program) and DSST (Dantes Subject Standardized Tests). Certain academic/professional programs also require specific entrance tests, such as the A2 Admissions Assessment (Nurse Entrance Test), Dental Hygiene Assessment (Dental Hygiene Entrance Test) and the Praxis Core Academic Skills for Educators (Core) Tests, and these are also administered by the Testing Center. The University is required to document student outcomes and the Testing Center participates in this effort by administering selected Major Field Tests as well as the Senior Exit Exam, the ETS Proficiency Profile, which is required of all graduating students.

To facilitate admission to Graduate and Professional Schools, the Testing Center administers the Miller Analogies Test (MAT) and offers the GRE and MCAT through the TSUETS/Prometric Computer-Based Testing Lab. The Testing Center also administers the LSAT (Law School Admission Test) according to the nationally published dates.

## TSU-ETS Computer-Based Testing Lab

The TSU Testing Center operates an ETS/Prometric Computer-Based Testing Center, Site \#7741, in Room 220 within Avon Williams Campus. This Center is open to the public and offers the following tests: GRE (Graduate Record Examination; TOEFL (Test of English as a Foreign Language); Praxis Core Academic Skills for Educators (Core) Tests; Praxis II Subject Assessments (Teacher Certification) and MCAT (Medical College Admission Test).

## Proctored Tests and Distance Education

Students involved in distance education through RODP (Regents Online Degree Program) courses and web-based courses are often required to take proctored examinations. This assures accrediting organizations that students taking their examinations have provided proof of identity and taken their tests under supervision and according to standardized procedures. The TSU Testing Center supports this effort to maintain the integrity of distance and asynchronous programs and schedules proctored examinations for students who need to take paper or web-based tests. This service is also provided for businesses and other organizations that need to schedule proctored tests as a part of employment screening and certification procedures.
High School Equivalency (HSE) Testing and Workforce Development
The HiSET (High School Equivalency Test) and GED (General Educational Development) Exam offer adults who have not earned a high school diploma a second opportunity to demonstrate their skills and knowledge and earn a high school credential. The primary reasons that adults give for seeking a HSE diploma are for employment or for higher education. The TSU Testing Center contributes to workforce development and access to college by conducting both paper-based and computer-based HiSET and computer-based GED testing approximately ten times a month.
A contribution to the assimilation of immigrants and other nonnative speakers of English, into the workforce is made through the routine administration of the HiSET and GED test in Spanish and of the Test of English as a Foreign Language (TOEFL) required by many schools and employers as evidence of communication skills in English.

## Certifications and Professional Licenses

The Testing Center cooperates with a number of credentialing agencies and test companies to administer a variety of national examinations. The Testing Center routinely administers the following examinations according to the national schedule for each test:

1. Praxis II Subject Assessments/ National Teacher Exams
2. School Leaders Licensure Assessment \& School Superintendent Assessment
3. National Opticianry Competency Exam \& Contact Lens Registry Exam
4. Multistate Professional Responsibility Examination (MRPE)
5. Collegiate Strength and Conditioning Coach (CSCC) Certification Exam
6. Electrical Generating Systems Association (EGSA) Certification Exam
7. International Fluid Power Society (IFPS) Certification

Other certification tests are also administered when there is sufficient interest within the Nashville and middle Tennessee area.

## The University Honors Program

Coreen Jackson, Ph.D., Director

Harold M. Love, Sr. Student Success Center Suite 119

Faculty: J. Anderson, P. Ark, M. Bertrand, S. Browne, C. Codreanu, R. Dixon, T. Duello, A. Ejofor, S. Guha, J. Hall, M. Hull, C. Jackson, L. James, C. Johnson, K. Johnson, T. Johnson, P. Kahlon, M. Karim, L. Lewis, E. Martin, V. Matlock, D.L. McGahey, J. Miglietta, J. McKinney, S. Morgan-Curtis, C. Murillo, C. Okoro, D. Padgett, J.B. Parham, M. Payne, E. Phillips, L. Powers, E. Schmeller, T. Siddiquee, R. Taylor, J. Thompson, M. Zheng.

General Statement: The University Honors Program (UHP) mission is to promote positive and life-long learning, scholarly inquiry, and a commitment to the service of others. This interdisciplinary program is designed for the academically bright and gifted students. Since its inception in 1964, the Honors Program has been a leader in identifying academically-talented students, and maintaining our charge to promote scholarship and provide a stimulating and challenging educational experience that prepares them for global leadership.

From its inception, the primary goal of the Program has been to create and maintain a community of academically bright and talented students who would serve as campus leaders and role models, impacting positively on the University and enhancing the mission of Tennessee State University. The Honors Program at Tennessee State University stresses excellence as a way of life.

The Program: The UHP offers special opportunities for exceptional high school graduates or college students with a record of achievement and a sincere desire to lead and learn. The UHP is designed to offer the academically exceptional student an educational experience that is a step beyond the norm.

Through the Honors curriculum and special programs, gifted students are challenged, stimulated and inspired intellectually to explore their potential and reach new levels of academic excellence. Students are exposed to an advanced curriculum that provides opportunities for critical analysis, creative achievement, intensive research and scholarly thought and spirited exchange with classmates and teachers.

Course Work: UHP course work is concentrated in the freshman and sophomore years, when students will take enriched versions of general education courses. At the junior and senior levels, when students are fully involved in their major area of specialization, courses will be supplemented with interdisciplinary honors colloquia or honors special topics and selected honors courses within the student's discipline. Before graduation, students are expected to complete a senior thesis through the UHP or the major. The thesis is defended before a committee or a recital for those students in the performing arts. In short, the UHP is directed at students who want to combine the best of liberal education and professional specialization. The Honors Program does not require additional courses beyond those required of other students. Grades awarded in UHP courses coincide with those given for courses in the regular curriculum.

Benefits: While providing the advantages of a growing state university (low cost, vast resources, and cultural diversity), the UHP also harnesses the attractiveness of a liberal arts college (individual attention, small class size, and close interaction with faculty and fellow students).

Other benefits include:

- scholarships designated specifically for honors students
- a variety of social and cultural activities
- challenging courses designed especially for UHP students with limited enrollment
- intellectually-oriented faculty and peers
- domestic exchange to outstanding universities for a semester or year
- opportunities for study abroad
- exposure to special internships and graduate study opportunities
Admission/Retention Requirements: In addition to the general application for admission to the University, the prospective Honors student must also complete the application for admission to the UHP. UHP students traditionally pay dues determined by the Honors Student Council to help defray costs of some student oriented activities.

Entering freshmen making application to the UHP are required to have a 3.4 GPA ( 4.0 scale) and a 25 on the ACT. The director reserves the right to make decisions about admission to the Program based on a review of the transcript, test scores, courses taken, community service, and letters of recommendation from high school.
Baccalaureate students who do not participate in the UHP as entering freshmen may be admitted later by recommendation of a University faculty member and a 3.4 GPA. The latest point for a student to enter the UHP is the first semester of the junior year.
Freshmen are required to take 24 honors credits, entering sophomores are required to take 18 honors credits, and entering juniors are required to take 12 honors credits to have honors designation on the diploma upon graduation from the university.
To remain in good standing in the UHP, a student must maintain a minimum cumulative grade point average of 3.25 GPA, based on all course work. A student may withdraw from the Program at any time, but should first notify the Honors office.

Graduation with University Honors: At commencement, students who complete the requirements of the Honors Program will graduate with "University Honors." They are awarded the Honors senior pin and the scarlet and gold cord at the annual spring Honors Convocation.

These requirements include: 1) taking required Honors courses, UHP approved contract courses may be used to give a regular course an "honors dimension." 2) giving a recital or writing and defending a senior thesis (some students make substitute an acceptable senior project in the major). The student will select a topic for the Honors thesis with the approval of his or her major advisor and the instructor of the course. The topic may be related to the major field of interest or to a colloquium. Insofar as possible, advisors for the Honors thesis will be members of the Honors faculty. The student will select the topic in his or her senior year and defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense, and 3) maintain a cumulative average of at least 3.25 based on all course work.

## Honors Courses:

| RECOMMENDED | COURSE(S) | CREDIT HRS |
| :---: | :---: | :---: |
| ENGL 1012-1022* | Honors Freshman English I-II | 3-3 |
| BIOL 1112-1122 | Honors General Biology I- <br> II | $\begin{gathered} 4-4 \\ \text { (BIO majors) } \end{gathered}$ |
| MATH 1111 | Honors College Algebra | 3 |
| CHEM 1112-1122 | Honors General Chemistry I-II | 3-3 |
| ART 1011 | Honors Art Appreciation | 3 |
| Music 1020 | Honors Music Appreciation | 3 |
| HONR 1002* | Honors Service to Leadership | 1 |
|  | SOPHOMORE YEAR |  |
| RECOMMENDED | COURSE(S) | CREDIT HRS |
| ENGL 2312-2322* | Honors World Literature I-II | 3-3 |
| HIST 2011-2021 | Honors American History I-II | 3-3 |
| COMM 2202* | Honors Public Speaking | 3 |


*Required honors courses. All other honors courses are electives.
Students must take at least 12 honors credits on the 3000/4000 level.

## Course Descriptions

HONR 1002 Honors Service to Leadership (1). This course is designed as an orientation class for UHP freshmen as well as an opportunity for professional/personal development. Students are exposed to corporate and business professionals who conduct modules on all aspects of professional growth. Students also prepare and present a professional portfolio.

HONR 3002 Honors Junior Colloquium (3). Lectures, discussions, and student writing based upon a central theme - such as "Famous Biographies" - which may vary from year to year. Original work and interpretations and adaptations of original works are bases for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he/she deems it advisable.

HONR 3012 Honors Special Topics (3). A junior level course designed to expose students to current issues, personalities, activities, and career opportunities in various areas of study offered by the university, through guest speakers, field trips, and the study of selected topics that will prepare them for excellence upon graduation. Some sections designated as part of the Leadership curriculum. This course is usually experiential in nature. Course may be taken twice.

HONR 4002 Honors Senior Colloquium (3). Lectures, discussions and student writing based upon a central theme - such as "Black Arts" which may vary from year to year. Original work and interpretations and adaptations of original works are bases for discussions. The faculty member who conducts the colloquium may invite outside experts to participate when he/she deems it advisable.

HONR 4012 Honors Special Topics (3). A senior level course designed to expose students to current events, issues, personalities, activities, and career opportunities in various areas of study offered by the university, through guest speakers, field trips, and the study of selected topics that will prepare them for excellence upon graduation. Some sections designated as part of the Leadership curriculum. This course is usually experiential in nature. Course may be taken twice.

HONR 4032 Honors Summer Seminar (6). A course designed to expose students in the Honors Program to different cultures through the study of cultural norms, government, schools, current issues, and career opportunities. The goal may be accomplished through actual travel to a different culture or through studying "the city as text." May also be offered in the Spring semester.
HONR 4102 Honors Senior Thesis (3). The student will be allowed freedom of choice in selecting a topic for his/her Honors thesis. The topic may, for example, be related to the students' major field of interest or to a colloquium taken in the UHP. Insofar as possible,
advisors for the honors thesis will be members of the Honors faculty. The student will defend it before the Honors Thesis Committee and such other persons who may be invited to sit for the defense.

## The Avon Williams Campus Center for Extended Education and Public Service

## Dr. Evelyn E. Nettles, Associate Vice President for Academic Affairs Suite M200, Avon Williams Campus (615) 963-7001

The Avon Williams Campus (AWC) of Tennessee State University is located at 330 10th Avenue North, in the heart of downtown Nashville. This facility, which serves as the hub for the University's night, weekend, and distance education offerings, was named for the noted Civil Rights attorney Avon Nyanza Williams Jr. who brought litigation that sought to end segregation in public higher education in the state of Tennessee. At the Williams Campus, traditional and nontraditional students are afforded the opportunity to earn a degree during the day, in the evening, on weekends, and via distance education delivery systems. Both undergraduate and graduate degree programs are offered at this facility. The Williams Campus houses the offices of Student Support Services for Adult and Distance Learners, Distance Education and Multimedia Services, and Continuing Education. Through academic programming and reliable and efficient student support services, the University reaches beyond its walls to serve citizens throughout the state and around the globe.

## Center for Extended Education and Public Service

The Center for Extended Education and Public Service is the administrative unit at AWC responsible for coordinating academic and community service outreach that advances TSU's mission of instruction, research, and service. It is also the administrative unit responsible for the operations of the Avon Williams Campus. Programs offered through Extended Education are designed to meet the professional, career development, personal and civic awareness needs of persons in the University's service area, and among select client groups throughout the state and the nation. When specific needs are identified, instruction or assistance is provided on and off campus at times convenient to the learner or the sponsoring organization. All services are designed to facilitate individual adult participation, learning, achievement and/or organizational development.
Student Support Services for Adult and Distance Learners (OSSADL): The primary goal of a OSS-ADL is to provide a single point of access for academic and support services and to remove barriers for nontraditional students by extending services beyond the traditional hours in a seamless approach. The Office of Student Support Services for Adult and Distance Learners coordinates and makes available, within the standing University academic and student services structure, support services for students who attend classes at night, on weekends, at off-campus sites, and via distance education delivery. This unit provides recruitment, admissions, and financial aid services to all nontraditional students. Through OSS-ADL, nontraditional students have access to the Counseling Center, Career Placement, Disabled Student Services, Graduate and Professional Opportunities, and Minority and International Affairs.

## Distance Education and Multimedia Services

Distance Education: Distance education at Tennessee State University allows the Institution to extend its resources in the areas of instruction and service to citizens within the state of Tennessee and to persons around the world. Classes are offered through various technological delivery systems including, interactive video instruction, TSU online, and the
Regents Online Campus Collaborative (ROCC). All distance education classes are planned and conducted in accordance with the academic requirements and regulations of participating academic colleges and schools. Descriptions of the various types of distance education delivery modes are as follows:

1. Interactive Video Courses - Interactive video courses allow TSU to broadcast live instruction to enrolled students on-ground and at remote sites, in addition to individual desktops via Voice-Over-IP (VOIP). The remote sites can include other colleges, universities, and school systems. This method of delivery allows the instructor to communicate in real time via both audio and video.
2. TSU Online Program - TSU Online courses are delivered via the University's course management system. Students are required to read assignments, participate in discussion groups, and communicate with professors and other students by email. In addition, students are responsible for reading textbook assignments, completing papers and projects, and taking examinations. As the course is delivered completely online, students must have proficient computer skills, access to a computer with administrative rights to download software and change computer settings, etc., and a dependable internet service provider (ISP). Students are required to complete an orientation module online prior to accessing their course(s). TSU online courses are designated in the course schedule as section 98. TSU offers the Bachelor of Science in Sociology and the Bachelor of Science in Urban Studies fully online.
3. Regents Online Campus Collaborative (ROCC) Tennessee State University, in collaboration with the Tennessee Board of Regents Online Campus Collaborative (ROCC), offers the Bachelor of Science in

Interdisciplinary Studies and Bachelor of Science in Professional Studies with concentrations in Health Administration, Organizational Leadership, International Organizational Leadership or Information Technology. Courses offered through these programs are delivered completely online although some courses may require proctored tests. ROCC courses are designed to meet the needs of the adult student who cannot attend school because of family, work, and/or other obligations. Students interested in pursuing one of these degrees must apply to TSU and meet the general admissions requirements. Upon acceptance to TSU, the student must meet with the TSU Student Support Services Counselor in person or by telephone to plan a program of study. In addition, academic advisement for students enrolled in the Regents Online Campus Collaborative is handled by the TSU Student Support Services Counselor. ROCC courses are designated as section R50. ROCC course fees are charged on a per hour basis and are in addition to standard course fees. While these courses are designed for students majoring in the degrees listed above, all TSU students may enroll in ROCC courses as approved by their faculty advisor.

## Center for Teaching, Learning and Technology (Multimedia Services)

The Center for Teacher, Learning, and Technology is to enhance the teaching and learning process in the classroom, distance education and continuing education programs by providing leadership, support and a broad range of services to Tennessee State University faculty, staff and students. This goal enables the University to incorporate existing and emerging technologies in the learning environment. The Center (1) provides training in the use of educational technology; (2) assists faculty develop, implement and assess the effectiveness of advanced research-based teaching and learning methodologies, including multimedia learning; and (3) increases the use of technologies in support of technology-
enhanced courses, online courses and other distance learning environments.

For more information, contact the Office of Distance Education and Multimedia Services at (615) 963-7001 or visit www.tnstate.edu/online.

## Non-Credit and Continuing Education

The Office of Non-Credit and Continuing Education offers noncredit courses designed to meet the professional, personal and civil needs of the adult community. The unit offers courses/activities throughout the year both on and off campus in response to special client needs and for the greater community that range from workforce development, skill enhancement to personal interest courses. The instruction is supported by regular and part-time faculty and it is designed to meet the special needs of both the vocational and avocational learner of which Continuing Education Unit (CEU) credits may be awarded.
Continuing Education Unit (CEU) credits are a quantitative unit of measure to recognize participation in an organized educational activity within the scope of non-credit courses. Participants of selected instructional activities that are approved within published guidelines earn CEU credits for the purposes of completing training programs, or obtaining and renewing licenses and certifications. Institutional records of such learning experiences are maintained by the Office of Non-Credit and Continuing Education and are available upon written request by the student. For more information, contact the Office of Non-Credit and Continuing Education at 615-9637001.

## CREDIT FOR THE NONTRADITIONAL LEARNER

Tennessee State University recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). Below are various means students may utilize to participate in PLA.

# The WRITE Program at Tennessee State University 

Dr. Samantha A. Morgan-Curtis, Director<br>scurtis@tnstate.edu

For more information contact:<br>The WRITE Program 220 Tom Jackson Industrial Arts BIdg.

www.tnstate.edu/write
(615) 963-2131

The WRITE (Write $\rightarrow$ Reflect $\rightarrow$ Integrate $\rightarrow$ Transfer $\rightarrow$ Excel) Program is Tennessee State University's Writing in the Disciplines initiative designed to promote and reinforce writing skills systematically throughout a student's course of study. The WRITE Program is committed to assisting students in participating majors to achieve their full potential as communicators in their disciplines and vocational fields.

Developed by faculty as TSU's Quality Enhancement Plan, the WRITE Program has grown out of the University's commitment to preparing students to be productive community members. The University's faculty members understand that for the immediacy of the $21^{\text {st }}$-century digital age, effective communication forms the foundation for all endeavors. Implementation of the WRITE Program began fall 2010 with the incoming students in ENGL 1010-1020. The writing skills and learning outcomes learned, established, and promoted in the students' first year writing courses will be reinforced in the HIST 2010-2020-2030 second year requirement. The WRITE Program then works with the students as they progress into the upper-division courses in their disciplines through the culminating capstone experience.

## Desired Student Learning Outcomes

The student learning outcomes governing WRITE are:

1. Students are able to distill a primary purpose into a single, compelling statement.
2. Students are able to order major points in a reasonable and convincing manner based on that purpose.
3. Students are able to develop their ideas using appropriate rhetorical patterns (e.g., narration, example, comparison/contrast, classification, cause/effect, and definition) in response to their specific rhetorical situation.
4. Students are able to employ standard diction, syntax, usage, grammar, and mechanics.
5. Students are able to manage and coordinate basic information gathered from multiple sources.

## The WRITE Studio:

The WRITE Studio, located in 220 Tom Jackson Industrial Arts Building, is a facility designed to provide students with access to support and services to enhance their writing as they prepare to become active participants in their fields. Through the creation of a genuinely interdisciplinary and interdepartmental WRITE Studio, WRITE recognizes the importance of a prominent, accessible, and attractive facility on campus providing a dedicated physical location for WRITE tutoring, workshops, and other activities. The arrangement of the space facilitates interpersonal interaction and maximizes flexibility for a variety of WRITE activities including workshops. The WRITE Studio reinforces the program's philosophy of writing as a craft and discipline. The facility itself conveys this vision of writing, above all, as the appropriate concern of good students and good writers desiring to achieve excellence.

## Participating Programs in WRITE:

Electrical Engineering, English, History, Human Performance \& Sports Science, Political Science, Psychology, Social Work, and Sociology.

## Service-Learning and Civic Engagement

For information, contact:
The Center for Service-Learning and Civic Engagement 306 Holland Hall - (615) 963-5383

Dr. Linda Guthrie, Director Iguthrie@tnstate.edu

WEBSITE www.tnstate.edu/servicelearning

Our Vision: Knowledge, Engagement, Reflection, Transformation - Where scholarly service is the bridge uniting learning with civic responsibility.
As a land grant university and an HBCU, Tennessee State University has a rich tradition of service and an opportunity to instill in our students an ethic of caring and a sense of responsibility for making our world better. We strive to move beyond service - to transform our university and our communities through sustainable partnerships.

## Goals of TSU's Service-Learning Programs

1. To expand our service-learning offerings to meet students' learning needs
2. To provide students with the opportunity to meet academic learning objectives through participation in community service experiences
3. To enhance student learning by connecting theory with experience and thought with action
4. To give students opportunities to engage in mutually beneficial work with the community
5. To increase the civic and leadership skills of students
6. To better prepare students for their careers and continuing education
7. To help students address issues of justice, diversity and social responsibility through service- learning
8. To educate students with the knowledge, skills, and attitudes to create a more just and humane world

Mission of the Center for Service-Learning and Civic Engagement: The Center exists to facilitate quality educational experiences through community-based service-learning. The Center connects campus and community resources to create diverse learning experiences and to serve community needs.

Its programs integrate the academic, service, and reflection components of service-learning by providing resources including training and technical assistance, to students, faculty and community. Through this mission, the Center advances TSU's goals of quality teaching, research, and service.

Service-Learning Courses: To be well prepared for our increasingly multicultural and global society, TSU students must develop the skills to work collaboratively and compassionately to create more just and equitable workplaces, communities, and social institutions. TSU's service-learning courses, therefore, include learning objectives that help students clarify their own concept of service as they participate in the community. Service learning enables moral and civic learning to become a component of the curriculum. Learning becomes a tool for both individual and social betterment. Through service learning, TSU students acquire the knowledge, skills and awareness to become more culturally aware, self-reflective and responsive community participants. Service-learning is integrated into courses in many academic majors across campus.

## Philosophy Statement

Social justice is the guiding principle for our practice in service learning. We believe that:

1. TSU students, as future leaders of our community, deserve a real world education that inspires social responsibility, cultivates respect for diversity, and encourages compassion for all;
2. TSU should be a responsible, engaged member of the local community;
3. Academic learning is strengthened by engaging in meaningful service and reflection; and
4. Education at TSU should be transformative, creating ethical and responsible community participants.

We have adopted the following core values to guide our work:

1. Building authentic partnerships that demonstrate shared leadership, collaboration and reciprocity;
2. Acting with compassion, demonstrating honesty and authenticity;
3. Working towards social justice: continual movement toward an equitable society;
4. Developing multicultural understanding and respect for differences; and,
5. Cultivating awareness of self in relation to social inequities through reflection and active service with the community.

## Civic Engagement at TSU

Civic Engagement: There are many ways in which people participate in civic, community and political life and, by doing so, express their engaged citizenship. From volunteering to voting, from community organizing to political advocacy, the defining characteristic of active civic engagement is the commitment to participate and contribute to the improvement of one's community, neighborhood and nation.

Community engagement, expressed in words and actions, has long been a core value of the university and of its faculty. We are actively involved in working with the communities that surround us and in fostering the well-being of the entire region. This ideal is summarized in the following commitment from the Center: We are committed to treating the metropolitan region as an extension of our campus. We will build mutually beneficial partnerships throughout the region that both serve the needs of the public and enhance the learning opportunities available to our faculty, staff, and students.

Defining the Language of Community Engagement: Although there are many accepted definitions of service-learning, TSU has approved the following definitions to guide our work:

Civic Engagement denotes "collaborative activity that builds on the resources, skills, expertise, and knowledge of the campus and community to improve the quality of life and to advance the campus mission. Civic engagement includes teaching, research, and service in and with the community" (Bringle and Hatcher, 2004).
Service-Learning is a course-based, credit-bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility; ~Bringle, R., Hatcher, J., \& McIntosh, R. Analyzing Morton's Typology of Service Paradigms and Integrity. Michigan Journal of Community Service Learning, Fall 2006, Vol 13, No. 1.

Engaged Scholarship: The National Review Board for the Scholarship of Engagement defines engaged scholarship as "scholarship in the areas of teaching, research, and/or service. It engages faculty in academically relevant work that simultaneously meets campus mission and goals as well as community needs. In essence, it is a scholarly agenda that integrates community issues. In this definition, community is broadly defined to include audiences external to the campus that are part of a collaborative process to contribute to the public good."
Community Engagement describes the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in the context of partnership and reciprocity. (Carnegie Foundation for the Advancement of Teaching)

## Leadership and Recognition in the State and Nation

Through the Center's leadership and programs, TSU has achieved visibility as a state leader among Tennessee colleges and universities in encouraging campus-community partnerships through academic service-learning. One statewide benefit of these initiatives was the establishment of a Tennessee Campus Compact (TNCC) hosted by TSU but serving the entire state. The TNCC was formally launched as the $34^{\text {th }}$ State Campus Compact in March 2008. In addition to being a leader in the state, TSU has earned national recognitions, such as being named to the 2008 President's

Higher Education Community Service Honor Roll. Also in 2008 TSU was a recipient of the Outreach Scholarship W.K. Kellogg Foundation Engagement Award and a finalist for the C. Peter Magrath University Community Engagement Award, both presented by the National Association of State Universities and Land-Grant Colleges. In 2009 TSU received the Higher Education Civic Engagement Award from The Washington Center for Internships and Academic Seminars and was again recognized by the Corporation for National and Community Service by being named to the 2009 President's Higher Education Community Service Honor Roll with Distinction---the only university in the state to receive the "With Distinction" designation.

## Grant Support

Since 2005 the Center has received $\$ 4,472,724$ in grant funding from Housing and Urban Development, Health and Human Services Office of Minority Health, TN Board of Regents, Corporation for National and Community Service, and other universities. Most of the grant funds are used for community development initiatives focused in North Nashville.

# University Personnel and Instructional Faculty 

College of Agriculture, Human and Natural Sciences

Chandra Reddy, Ph.D., Professor, Dean, and Director of Research and Administrator of Extension Carter Catlin, Jr., Ph.D., Associate Dean for Research

Latif Lighari, Associate Dean for Extension

## Department of Agricultural and Environmental Sciences

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Tennessee State University; Ph.D., 1999, Alabama A \& M University
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[^0]:    > Click on Tennessee
    > Click on Online Scheduling
    > Enter your name - Click GO
    > Select Non-DCS Child Care/Adoption Providers -

[^1]:    *These courses must be selected from the list of approved General Education Courses.

[^2]:    MUSC 1000, 1001, 2000, 2001, 3000, 3001, 4000, 4001 Applied Percussion I-VIII (1). An intensive study of elements of percussion techniques. Accent is on snare drum rudiments, bass drum and timpani, solo and ensemble materials for percussion, tuned
    percussion instruments, and recital literature in preparation for Senior Recital. Prerequisite: follow course sequence. Laboratory fee \$100.00/course.
    MUSC 1100, 1101, 2100, 2101, 3100, 3101, 4100, 4101 Applied Piano I-VIII (1). Some of the works of Bach, Haydn, Mozart, Beethoven, and others whose works are of equivalent technical value, together with purely technical materials including all major and minor scales, exacting materials requiring excellent musicianship, skills, and techniques. The study of advanced piano materials. Prerequisite: follow course sequence. Laboratory fee $\$ 100.00$.

